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DE RERUM NATURA

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VOLUME I

T. LUCRETI CARI
DE RERUM NATURA
LIBRI SEX

WITH NOTES AND A TRANSLATION

BY

H. A. J. MUNRO
FELLOW OF TRINITY COLLEGE CAMBRIDGE

FOURTH EDITION FINALLY REVISED

VOLUME I: TEXT

CAMBRIDGE
DEIGHTON BELL AND CO
LONDON G. BELL AND SONS
1886

T. LUCRETI CARI
DE RERUM NATURA
LIBRI SEX

EDITED BY

H. A. J. MUNRO
FELLOW OF TRINITY COLLEGE CAMBRIDGE

FOURTH EDITION



CAMBRIDGE
DEIGHTON BELL AND CO
LONDON G. BELL AND SONS
1886

Cambridge:
PRINTED BY C. J. CLAY, M.A. AND SON,
AT THE UNIVERSITY PRESS.

TO BENJAMIN HALL KENNEDY D.D.
REGIUS PROFESSOR OF GREEK IN CAMBRIDGE
AND LATE HEADMASTER OF SHREWSBURY SCHOOL
THESE VOLUMES ARE DEDICATED
BY HIS FORMER PUPIL THE EDITOR

M b

MY DEAR DR KENNEDY,

On the completion of a work which has cost both thought and labour I gladly dedicate it to you, to whom indirectly it owes so much. Many years have passed since the days when I was among your earliest pupils at Shrewsbury; but the memory of the benefits then received from your instructions is as fresh as ever. A succession of scholars year after year from that time to this will bear testimony to the advantages which they have derived from your zeal skill and varied knowledge; and over and above all from that something higher which gave to what was taught life and meaning and interest: denn es musz von Herzen gehen, was auf Herzen wirken will.

The present edition claims as you will see to do something both for the criticism and for the explanation of the poem. After the masterly work of Lachmann you will think perhaps that too much space has been allotted to the former; but that portion of the book is intended partly to give the reader in a condensed shape the results of his labours, partly to add to and correct them where circumstances or design rendered them incomplete. The scandalous negligence with which Havercamp and Wakefield executed what they professed to undertake has made their editions worse than useless, as the reader who trusts to them is only betrayed and led into error. What Lachmann performed is known to all who take an interest in such studies: from my first introduction readers will learn what opinion I entertain of his merits; they will also find that all which I have added to what he has done is with one insignificant exception derived from the original sources to which they refer. The manuscripts which I have cited were examined by myself; the editions and manuscript notes were open before me all the time I was at work. The large amount of critical material thus amassed I have endeavoured to put into as

concise and compressed a form as possible; though much of this material needs perhaps to be recorded only once and might be greatly abridged if it has ever to appear again in a new shape.

The length of the explanatory notes calls I fancy for less excuse. This very year three centuries have elapsed since Lambinus published the first edition of his Lucretius; and from that day to this nothing new and systematical, nothing that displays pains and research has been done for the elucidation of our author. Transcendant as are the merits of that illustrious scholar, what was suited to 1564 can hardly satisfy the wants of 1864. No defence then is needed for the extent of this division of my commentary: if it were done over again, more would probably have to be added than taken away. It will not be so easy perhaps to excuse the translation. This however is really a part of the explanatory notes; and if it had been left undone, they must have been enlarged in many directions. Our author too unless I am mistaken will admit of being thus treated better than most; and the fashion of literal translations seems to be gaining ground in this country as well as in Germany and France.

To the advice and friendly assistance of my brother fellow Mr King, our highest authority in that branch of art, is due the likeness of the poet which appears on the titlepage. With K. O. Mueller, Emil Braun and other judges he is convinced that the original on a black agate represents our Lucretius. The style of art and the finely formed letters of the name point to the late republic. Almost unknown then in other respects, in this he has been more fortunate even than Virgil, whose so-called portraits are all I am told late conventional and unreal.

Sincerely yours

THE EDITOR.

TRINITY COLLEGE, OCTOBER 1864.

PREFACE TO THE THIRD EDITION

ALTHOUGH in outward shape this third edition exactly resembles the second, it will prove I trust in essential points to be more in advance of the second, than the second was of the first edition. Partly for other obvious reasons, and partly because the second impression was larger than the first and has now been exhausted for nearly a year, the interval given me for reflexion has been much longer; and as the author is now so familiar to me, I have been able to bring all my reading to bear upon the improvement of the text and the commentary. The critical notes are I believe improved in many important points, though their bulk of course has not been increased: compression was needed here rather than expansion. The explanatory notes however have been enlarged by the substance of at least fifty pages, chiefly through a somewhat closer printing. Nor does this at all represent the real amount of change, as many of the longer notes have been entirely rewritten and much that was superfluous or erroneous has been cut out. Many thousand fresh illustrations have been added.

For more precise conceptions on some points of the poet's philosophy, especially the motion of his atoms, I have been greatly indebted to the works of Professor Clerk Maxwell and Professor Tyndall, and to a thorough and excellent article in the 48th volume of the North British Review on 'the atomic theory of Lucretius': of Martha's brilliant work I have spoken elsewhere. For the general criticism of my author I owe

much to the well-pondered remarks of Mr N. P. Howard, whose letter to me I have printed in the first number of the new Journal of Philology; and, especially in the third and fourth books, to the communications of my friend Professor J. E. B. Mayor, to whose notes I have appended his initials.

In the 25th and 26th volumes of the Philologus there is a long 'Jahresbericht' by Mr Fried. Polle on the Lucretius literature after Lachmann and Bernays; and some remarks of his occur in Jahn's Jahrbuecher. He hardly touches on the interpretation or philosophy of the poet nor have I been able to adopt any of his own conjectures which are not very numerous. The most valuable hint I have got from him is on v 312, though my own correction is very different from his. In several volumes of the same Philologus appear very prolix notes on the earlier books by Mr Susemihl and Mr Brieger. The former confines himself chiefly to rearranging paragraphs and to proposing numerous transpositions of verses, in neither I think with much success. Many of his new arrangements of paragraphs are I assert demonstrably wrong; and his violent transpositions would lead to the wildest confusion. Once however I have obeyed him in not making a new paragraph of IV 168—175: it was an accident that this was not done before, as my attention was absorbed in refuting Lachmann's errors there. Mr Brieger, who is the more combative of the two, indulges mainly in conjectural alterations of the text. Once or twice I have referred to Mr Holtze's 'Syntaxis Lucretianae lineamenta.'

On the whole my criticism is now I believe more conservative than it was. Again and again I have found that, seduced by the learning of Lachmann, I have followed him in changes which really corrupt the author. This must hold then in many other cases as well. If the text of Virgil rested, like that of Lucretius, on a single manuscript, how much there is in him we should refuse to accept as Latin! This 'must give us pause.' Yet I have not sinned I think in defending the indefensible.

It is probable however that, if I should ever issue another edition, I should leave as manifestly corrupt some passages which defy anything like certain or even very specious correction.

My lamented friend Professor Conington published a lecture on the style of Lucretius and Catullus which has been reprinted among his Miscellaneous works. This lecture, written in a tone of the kindest courtesy, is for the most part a criticism of a single paragraph in the introduction to my explanatory notes; and, so far as Catullus is concerned, almost of a single sentence. This paragraph I have now omitted: justice could be done neither to him nor to myself within the limits that could be permitted here. If I should ever venture on any reply, some other place and opportunity must be found for it.

TRINITY COLLEGE, APRIL 1873.

PREFACE TO THE FOURTH EDITION.

The present edition is divided into three volumes, the first containing the text and critical notes, the second the commentary and general index, the third the translation.

The text is practically the same as in the last edition: in one place only (I 442) a new reading is printed, and that was only omitted before through accident as was explained at the end of the index. There are a few additions, not more than half-a-dozen, to the critical notes; these have been inserted in square brackets. The translation too has undergone no change.

In the commentary there are few alterations but considerable additions amounting in all to more than twenty pages. These supplementary notes and illustrations have been taken from an interleaved copy of the last edition which was found among Mr Munro's books after his death in the spring of last year. Also on p. 333 of the commentary will be found some extracts from letters addressed by him to Professor Palmer of Trinity College, Dublin, discussing the reading of V 1010; Professor Palmer was kind enough to send me these letters. As the extracts deal with the criticism rather than the explanation of the passage, they should have been inserted in the first volume; but by an accident they were delayed until after that volume was printed. Nothing has been inserted from any other source whatever. Here too all that is new has been inclosed in square brackets. In the new examples the references have been verified. To the index large additions have been made by myself.

It remains to express my thanks to Dr Forbes, the relative and executor of Mr Munro, for the kindly feeling which led him to entrust me with the preparation of this edition, and also for the generous consideration he has shown throughout.

J. D. DUFF.

Trinity College, Cambridge,
Feb. 18, 1886.

LUCRETIUS.

NOTES I

ON THE FORMATION OF THE TEXT

If Lucretius had come down to us with a text as uninjured as that of Virgil and a few other ancient writers, he could scarcely have been reckoned among the most difficult Latin poets. Certainly he would have been more easy to explain than Virgil for instance or Horace; for he tells what he has to tell simply and directly, and among his poetical merits is not included that of leaving his reader to guess which of many possible meanings was the one he intended to convey. Fortune however has not dealt so kindly with him. Not that the great mass of his poem is not in a sound and satisfactory state: in this respect he is better off than many others; but owing to the way in which it has been handed down, his text has suffered in some portions irreparable loss. It is now universally admitted that every existing copy of the poem has come from one original, which has itself long disappeared.

Of existing manuscripts a fuller account will presently be given: let it suffice for the moment to say that the two which Lachmann has mainly followed and which every future editor must follow, are now in the library of Leyden. One is a folio written in the ninth century, the other a quarto certainly not later than the tenth. Large fragments of one, if not of two others, of the same age as the quarto and very closely resembling it are also still preserved, partly in Copenhagen, partly in Vienna. These manuscripts and at least one more must have lain for centuries in the monasteries of France or Germany, where they found at different periods several correctors, more or less competent. It is to be presumed then that they had some readers, though few if any traces of them are to be met with in the voluminous literature of the middle ages. In my previous editions I said that my friend Professor Mayor had given me a reference to Honorius of Autun in the bibliotheca maxima patrum XX p. 1001, who is there made to quote II 888 in this way, *Ex insensilibus me credas sensile gigni*, the context proving that he meant to say *ne*, not *me*; and asked whether this writer who flourished in the first

half of the twelfth century had taken the line from the poem itself; or had borrowed it from Priscian inst. IV 27 who cites it with *nasci* instead of *gigni*, the editor of the bibliotheca having thought fit tacitly to substitute *gigni* from Lucretius. The latter is proved to be the fact by Mr Julius Jessen in the philologus, vol. 30 pp. 236—238: he quotes what follows from Barthius' very learned note on Stat. silv. II 7 76: 'nec vero cadentibus aut collapsis iam rebus Romanis auctoritatem suam amisit Lucretius noster, ut videre potes apud Magnentium Rhabanum praefatione Laudum Daedalarum Crucis, Gulielmum Hirsaugiensem in Institutionibus Philosophicis et Astrologicis, Honorium Augustodunensem in Historia Mundi, Ven. Bedam Libro de Metris'. Referring to the only printed edition of this work of William of Hirschau, who lived from 1026 to 1091, he shews that Honorius copied from him the passage in question, and that William cites it thus: 'Ex insensili credas sensile nasci', getting it clearly then from Priscian. Hrabanus Maurus and Beda seem just as little to have known Lucretius at first hand. [Hermes vol. 8 p. 332, it is said that in Brit. Mus. ms. 377 (13th century) of Daniel de Merlai's Philosophia, in p. 90 a, Lucretius is quoted.]

In Italy he was even more completely unknown. A catalogue which Muratori antiq. III p. 820 assigns to the tenth century, proves that the famous library of Bobbio contained at that time *librum Lucretii* I; but before the fifteenth no Italian poet or writer shews any knowledge of him whatever. In the year 1414 the celebrated Poggio Bracciolini went as apostolic secretary to the council of Constance and remained on this side the Alps in different countries, Switzerland Germany France and England, until 1420, with one short interval passed in Milan and Mantua. During these years he procured from various monasteries many most important Latin works hitherto totally unknown in Italy: see Mehus' preface to his life of Ambrosius Traversarius p. xxxiii foll. Among these was a manuscript of Lucretius, obtained apparently from some German monastery either by him or his companion Bartholomew of Montepulciano, about 1417 as his letters seem to indicate, and transmitted the same year to his intimate friend the Florentine Nicolò Niccoli, a most zealous scholar and patron of the revived classical studies. This manuscript, which Poggio wrongly supposed to be only a part of the poem, has itself disappeared, but was the parent of every copy written during the 15th century, that is to say of every one now extant with the exception of those specified above: it must have very closely resembled the Leyden folio. 'Et te, Lucreti, longo post tempore tandem Civibus et patriae reddit habere suae' says Landinus in his poem in praise of Poggio. Niccoli having such a treasure in his hands was in no hurry to part with it. We find Poggio writing to him in December 1429 to remind him that he had kept his Lucretius twelve years. A few days later it is 'you have had Lucretius now for fourteen years; I want to read him, but cannot get him; do you wish to keep him another ten years?' He had already tried in vain what coaxing could do: he promises him at one time to send the book back in fifteen days, at another time in one month, if he will only let him have it for so long; but feels sure his book will come to him at the Greek calends. Much as Niccoli loved Poggio, he loved still more to have the sole possession of a newly discovered Latin poet, and I doubt whether Poggio saw his Lucretius at all events before his return from Rome to Florence in 1434. Niccoli died in 1437 and left behind him a manuscript written by his own hand and now in the Laurentian library, the truest representative of Poggio's lost original, as is abundantly proved by the critical notes of the present edition. Between this date and that of the earliest printed editions a knowledge of the poem was diffused through Italy by many incorrect copies. Eight of these, including Niccoli's, are preserved in the Laurentian library, all of which I have examined, two with care, as being of no small importance for the text; six are in the Vatican, all seen by me as long ago as the autumn of 1849. Of the copies in England I have had in my hands at least seven; one of these belonging to our Cambridge library has been open before me the whole time I was writing my critical notes. Those manuscripts which have been of any importance in forming the text will be more fully spoken of, after the printed editions have been discussed.

The editio princeps, of which only three copies are known, was printed about 1473 by Ferandus of Brescia. It is the only one of the early editions which I do not possess; I have had to trust therefore to the very unskilful collation of Gerard at the end of the Glasgow edition of Wakefield. As it was printed from a manuscript a good deal corrected, but yet inferior to such amended copies as the Cambridge ms. for instance or that which I call Flor. 31, it is of little importance in the history of the text: of far less than the two next editions, since they by accident came to be the foundation of the vulgate. The former of these was published by Paulus Fridenperger at Verona in 1486 'die vigesimo octavo septembris calen. octobris'. It was printed from a ms. closely resembling the one written by Niccoli, as may be seen by the most cursory inspection of my critical notes. It is therefore very rude and inaccurate, but being less interpolated than the editio princeps or the majority of existing mss. it represents the archetype more faithfully than these do, though there is hardly a line without some monstrous blunder. The next edition was published in Venice 'per theodorum de ragazonibus de asula dictum bresanum' 4 september 1495. From some elegiac verses at the end one C. Lycinius would appear to be its editor, if editor he can be called; for it exactly reproduces for the most part the Verona edition even in the minutest points of its perverse punctuation. There are however throughout the poem not a few differences in the two editions, some

of little, others of greater importance; for example IV 125—190 are wanting in the Verona, but not in the Venice. The reason why I dwell on this fact will appear presently.

In December 1500 Aldus published his first edition of our poem, the first systematic endeavour to make it intelligible throughout. The editor was Hieronymus Avancius of Verona, who dates his dedication 'Kalendis Martii. M.ID', old style I presume, and really therefore 1500: an interval of twenty-two months between the two dates would not be easy to understand. Avancius is known by other works also, especially the Aldine edition of Catullus. A slight inspection will shew that he took either the Verona or the Venice edition, upon which to form his text; a more careful examination will prove that it must have been the latter. My critical notes will furnish many other instances; let me here only mention that in III 994 he and Ven. have *torpedine* for *cuppedine*, while Ver. reads *turpidine*; 1011 he takes from Ven. its remarkable reading *egenus*, which Lachmann adopts and wrongly assigns to Marullus: Ver. follows the Leyden and all other known mss. in reading *egestas*; 1015 he and Ven. have the absurd reading *numela* for *luella*, where Ver. has the equally unmeaning *biela*. Ven. therefore is the 'ante impressus' spoken of by Aldus. Avancius' preface shews that for his day he was a good and well-read Latin scholar, and had studied Priscian Nonius and Macrobius for the illustration of his author. Aldus in his prefatory letter to Albertus Pius confirms this, and says that he knew Lucretius by heart, 'ut digitos unguesque suos'. Avancius in his preface asserts much the same; and the few critical remarks he there inserts shew that this was true at least to a certain extent. At the same time he admits with a seeming candour that owing to the immense difficulty of the work he has left much for others to do. Much indeed he has left undone; and it would have been a herculean task for one man fully to correct the desperately corrupt Venice edition, especially in those days when there were but few extraneous aids and the art of systematic criticism was still in its infancy, two generations having yet to elapse, before it reached its full growth in the hands of the illustrious school of French critics. What he has done however is very great and entitles him to high praise, if it is indeed his own. But this shall be considered presently. The next edition is that of the well-known scholar Ioannes Baptista Pius, published 1511 'kal. Maii' in his native Bologna. Lucretius' text is embedded in an enormous commentary which displays amid much cumbrous learning no slight acquaintance with the Latin poets, several of which he edited before and after his Lucretius. He thus describes what he has done: 'contulimus non sine aerumnis vigiliisque diutinis codicem veneti Hermolai: et Pomponi romani: codicemque non omnino malum: qui servatur Mantuae in bibliotheca quadam suburbana: qui fuit viri non indocti gentis clarissimae Strotiorum. non defuit Philippi

Beroaldi praeceptoris quondam mei: nunc collegae: impressus quidem: sed tamen perpense examinatus. Codri quoque grammatici Bononiensis: cuius copia mihi per Bartholomeum Blanchinum virum eloquii excultissimi facta est: Marullique poetae industria mira castigatum non defuit exemplar Severo Monaco Placentino graece latineque perdocto musarum athleta non gravatim offerente'. He makes no mention at all of the man to whom he was most indebted, Avancius: for his text is a reprint of the first Aldine, with however not a few changes of words or phrases, often for the better, often for the worse, either inserted in the text or proposed in the notes, and derived it may be presumed in many cases from one or other of the sources just mentioned. But strange to say when he makes a change in the text, the lemma of his note nearly always contains not this reading, but that of Avancius as if he had meant it to stand: thus I 9 he rightly reads *diffuso lumine*; but his lemma has *diffuso numine* with Avancius, which the latter however corrects at the end of his Catullus: and he adds 'sunt qui legunt *lumine*'. 15 for *capta* he wrongly inserts in the text *quodque*; but his lemma has *capta*, and his note rightly explains the construction and makes no mention of *quodque*. 34 his text properly has *Reiicit*, his lemma *Refficit* after Avancius; 35 his text wrongly gives *suspirans*, the lemma *suspiciens*; and so throughout the poem. This very singular circumstance I explain in this way: he was living at Rome when his edition was printed and seems to have sent the text and commentary separately; for the bookseller prints at the end a long page of errors with this notice prefixed, 'Hieronymus Platonicus Bononiensis bibliopola ad lectorem. contuli Pii exemplar cum edito Lucretio: labeculasque pauculas notavi cet.' Pius' edition was reprinted by Ascensius in 1514 with not a few changes in the text, some of them taken from the notes.

The next edition must be ever memorable in the history of Lucretius, that published by Philip Giunta 'anno salutis. M.D.XII. mense martio'. Whether this means 1513 new style I cannot tell; but I know that he dates a Gellius and a Romualdi vita as published in January 1513, 'Leone pont. max. christianam R.P. moderante' and 'Leonis X anno primo'. Now Leo X only became pope in March of that year; so that here he must be speaking of 1514; and in Florence at all events this mode of dating seems to have been in common use. The editor was Petrus Candidus who, great and important as the corrections are which he has introduced, has yet used a copy of the first Aldine upon which to make them, though he has never mentioned the name of Avancius. It seems to have been the practice of those times to take at least whatever was printed without acknowledgment: thus Giunta regularly made booty of Aldus, Aldus of Giunta in turn. What is said in the present case is grounded on a close inspection of the two volumes. Candidus, where he does not designedly leave him, follows Avancius in

the minutest points of spelling and punctuation. The latter for instance says in his preface that he writes 'veteres imitatus *repertumst, itemst, necessest*' and the like: Candidus in his preface that 'in tam culto, tam nitido, tam undecunque castigato poeta' he will not admit archaisms like *volgum, volnera*; or *nullast, haudquaquamst* and the like. And so in his text while rejecting Avancius' *patefactast, volnere*, etc., he keeps his *frugiferenteis, rapaceis* and a thousand such forms which have no authority in their favour, while those which he discards have much. Lachmann always so hard upon Avancius says 'huius ineptissimam scribendi rationem Eichstadius studiose imitatus est', but has not a word of blame for Candidus.

But whence has the latter got his many and brilliant corrections? for few or none appear to come from himself. He says in his address to Thomas Sotherinus that what he did was to collate all the *vetusta exemplaria* that were in Florence and to expunge what was condemned by the obeli of Pontanus and Marullus, 'praestantissimorum aetate nostra vatum'. He refers of course to John Iovianus Pontanus and his friend and pupil Michael Marullus, after Politian two of the first scholars and Latin poets of the most flourishing period of Florentine learning, the latter half of the fifteenth century: 'Marullo ed il Pontan' have the honour to be mentioned together by Ariosto in the Orlando XXXVII 8. But Candidus goes on afterwards to speak only of Marullus 'cuius in hoc opere censuram potissimum secuti sumus'; and in a note at the end he says that in changing the order of verses here and in most other places he has followed the arrangement of Marullus. To Marullus therefore everything which is peculiar to the Juntine has usually been assigned, whether in the way of praise, or of blame as by Victorius and by Joseph Scaliger who inherited among many other of his father's antipathies his dislike to Marullus. But Lachmann has gone much farther than this, and has given to him not only by oversight, as will be seen in notes 1, much that belongs to older authorities; but everything that first appeared in Avancius' edition as well, calling the latter 'fur improbus' and other opprobrious names. That he got much assistance from the labours of Marullus is certain; but by ascribing to the latter everything that is in the Juntine, in some respects more, in others less credit is given to him than he deserves. As I can throw some light on this interesting question, I will examine it at some length here and in various parts of notes 1.

The scholar, poet and soldier, Michael Tarchaniota Marullus Constantinopolitanus, as he calls himself in the editions of his poems printed during his life, appears from this title and his epitaph in San Domenico of Ancona, where he and so many of his ancestors are buried, as well as from the epithet Bizantius given to him by his friend Petrus Crinitus, to have been born in Constantinople. As he can hardly

have passed middle life when he perished in the river Cecina near Volterra April the 10th 1500, he must have been a mere child when on the capture of his native city he was brought to Italy, probably to Ancona. He received his training however in Florence, and he found a Maecenas in Lorenzo de' Medici. Though he never printed anything on Lucretius, his manuscript emendations appear to have been well known during his life, and a copy of the poet to have been found on him at his death: 'ex miseranda illa in mediis Cecinae undis Latinarum musarum iactura cladeque insigni unus est Lucretius receptus' says Candidus in his preface; and his friend Petrus Crinitus in his de honesta disciplina XV 4, published in 1504, but mostly written it would seem before Marullus' death, after well refuting an alteration of his which shall presently be referred to, adds 'quae ab eius quoque sectatoribus recepta sunt pro verissimis'. This intense love of Lucretius he seems only to have conceived in the latter years of his life. Candidus, whose preface full of feeling shews that he greatly loved Marullus and deeply deplored his untimely end, strives to make the most of what he did: he says 'Lucretianae adeo veneris per omnem aetatem studiosus fuit, ut cet.' But this must be an exaggeration: the first edition of his poems, published without a date, but not later than 1490, containing only two books of epigrams, shews so far as I can see no trace of any acquaintance with Lucretius. Catullus is chiefly imitated even in the elegiacs, and next to him Tibullus and Horace. Six pages from the beginning there is a poor poem of eight lines 'de poetis Latnis' [sic], in which he says that Tibullus Maro Terence Horace Catullus, each in his kind, are the only good Latin poets: *Hos si quis inter caeteros ponet vates, Oneret quam honoret verius.* The Roman editions of 1490 and 1493 I have not access to; but in December 1497, two years and a few months before his death, he published at Florence a much enlarged edition. A third and fourth book of epigrams are added: in these too I find no trace of Lucretius. Then follow four books of hymni naturales. In these, especially such as are written in heroics, the strain is 'of a higher mood', and we meet with frequent imitations of Lucretius, even in the lyrics, as *Opibusque late pollens tuis* which recalls *Ipsa suis pollens opibus.* But in these heroics it is to be noticed that the rhythm is Virgilian, not in any respect Lucretian even where he closely follows the latter's language, as in the hymn to earth: *Ante repentino caeli quam territus haustu Vagiat aetheriam in lucem novus editus infans. Cum proiectus humi nudus iacet, indigus, exsors Auxilii, infirmusque pedum infirmusque palati.* Then imitating at once and contradicting Lucretius' *ut aecumst, Cui tantum in vita restet* cet. he goes on *Atque uno non tantum infelix, quod sua damna Non capit et quantum superat perferre laborum.* This the last poem published in his lifetime is full from beginning to end of Lucretian phraseology. In this edition too he

inserts two new verses in the poem 'de poetis Latinis' spoken of above, *Natura magni versibus Lucretii Lepore musaeo illitis*, the best in the poem and recalling *musaeo contingens cuncta lepore*. Crinitus l.l. XXIII 7 quotes this poem and mentions a conversation he had with Marullus in which 'factum est iudicium nuper a nostro Marullo de poetis Latinis egregie perfectum et prudenter', and Ovid and other poets are blamed; and then it is added 'itaque legendi quidem sunt omnes inquit [Marullus]; sed hi maxime probandi pro suo quisque genere Tibullus Horatius Catullus et in comoedia Terentius. Vergilium vero et Lucretium *ediscendos asserebat*'. Let what has just been said be at once applied to a striking interpolation. After I 15 the Juntine first inserted the v. *Illecebrisque tuis omnis natura animantum*, which long kept its place in the common editions. Lachmann of course attributes it to Marullus, as do most editors. Lambinus says of it 'neque eum Naugerius neque Pontanus habuerunt. Marullus unus vir doctus ex auctoritate veteris cuiusdam codicis, quemadmodum mihi religiose asseveravit Donatus Ianottus, nobis eum restituit. amicus quidam meus ingenio et doctrina praestantissimus putat esse ab ipso Marullo factum cet'. What his authority is for that which he says of Pontanus I do not know, but Naugerius editor of the Aldine of 1515 properly omits the line, though he in general minutely copies the Juntine. Now this line is written by the hand of Angelo Politian in the margin of a manuscript which belonged to him and forms XXXV 29 of the Laurentian library. Politian died in September 1494, when Marullus could hardly yet have done much for Lucretius; and besides this as he had been long the deadly enemy of Politian, it is not likely the latter would have inserted in his manuscript one of his verses. I infer therefore that it is Politian's own; and as Candidus says in his preface that he collated all the 'vetusta exemplaria' in Florence, he could not have neglected this manuscript which was then in the famous conventual library of San Marco. I conclude therefore that Candidus' taking it from the margin of Politian's ms. is the right explanation of Ianottus' assertion that Marullus got it from an ancient codex. It is quite possible indeed that Marullus copied it himself from this ms. which passed to San Marco immediately after Politian's decease, and thus robbed him of his verse after death, as he is said to have robbed him of his bride during life. Naugerius has in his first page another variation from the Juntine, but that a perverse one: in I 7 he reads *Adventuque tuo* and joins it with what follows. This corruption I believe to proceed from Marullus; for his hymn to the sun contains a passage evidently imitated from Lucretius: *Cum primum tepidi sub tempora verna favoni Aura suum terris genitalem exuscitat auctum*: Adventuque dei *gemmantia prata colorat*: *At pecudum genus omne viget, genus omne virorum Perculsi teneras anni dulcedine mentes*. I can shew in other cases that Marullus corrupted Lucretius, where he has not

been followed by Avancius or Candidus: VI 650—652 are quite correctly given by Avancius, and in his learned preface he says with reference to 652 *Nec tota pars* cet. '*totus* prima brevi, quia *quoti* redditivus est'. Crinitus l.l. XV 4 quotes 650 651 rightly, and adds 'qua in re grammaticorum nobis authoritas patrocinatur, quando et *centesimus* et *millesimus* probe dicitur: *partem multesimam* inquit Nonius nove positum est a Lucretio pro *minima*, ne quis forte paulo incautius atque audacius a veteribus decedat. quae a me vel ob eam rationem sunt adnotata, quoniam Marullus Bizantius aetate nostra, vir alioqui diligens, paulo improbius delere haec et alia pro ingenio subdere tentavit; quae ab eius quoque sectatoribus recepta sunt pro verissimis'. Candidus gives these two verses rightly and says in note at end of Junt. 'citatur Nonio locus': he has got this clearly from Crinitus, who in the same chapter correctly quotes and illustrates I 640 *Quamde gravis* cet. which the Italian mss. and editions had corrupted: this too Candidus took from him: for Marullus appears to have read *Quam gravior Graios inter* as does Pius in his notes, and Gryphius of Lyons. Again VI 332 Avancius rightly gives *per rara viarum*, Candidus perversely after Marullus *per operta*: see his note. But fifty instances like the last might be quoted. Candidus has also missed some of the best of Marullus' conjectures: see for instance notes 1 to I 1013 where I have got from the margin of one of the Florentine mss. perhaps the most brilliant example of his critical acumen. Then again unless I greatly err I have shewn in my notes that Gifanius in preparing his edition had before him a copy of the Venice ed. of 1495, lent to him by the zealous scholar Sambucus, as he testifies both in his preface to Sambucus and in his address to the reader. In the former he says 'exemplum Lucretii ad nos dedisti, non illum quidem calamo exaratum, sed ita vetustum et idoneum, ut vicem optimi manuscripti fuerit, siquidem in eo vidi omnium paene mendorum origines, quae magnam partem a Michaele Marullo, cuius immutationes in eo adscriptae erant omnes, primum parta, mox admiserunt Florentini cet.': in the address he speaks of the 'Sambuci liber quem ipsius Marulli manu adnotatum magno pretio vir ille praestantissimus paravit'. Why then Lachmann p. 6 should write 'neque enim facile Gifanio credere possum Marulli ipsius manu annotatum fuisse illud exemplar impressum quod se ab Iohanne Sambuco utendum accepisse scribit' I cannot comprehend. Gifanius was a dishonest plagiary, but at the same time a most astute man. Why should he tell a gratuitous falsehood which Sambucus would at once detect? He was writing only two generations after Marullus' death; and even if Sambucus gave his money for what was not the handwriting of Marullus, it was at least a genuine copy of his notes. But notes 1 furnish abundant proof of what I say: see for instance those to I 806 II 16 V 44 and especially III 994. It appears then that Avancius got from Marullus much which the Juntine does not record, and on

the other hand, that Candidus took from Avancius without acknowledgment much that Lachmann and others assign to Marullus. Candidus, as I have said above, formed his text on a copy of the first Aldine: in doing this he must have had before him another edition with the ms. notes of Marullus, perhaps the very one which he tells us was found on him at his death. If now all that is common to the first Aldine and the Juntine comes from Marullus, as Lachmann maintains, surely Candidus must have been struck with this coincidence and would have recorded it against Avancius the editor of the great rival publisher. Yet Avancius did borrow largely, very largely from Marullus, especially in the case of interpolated verses made by the latter. How is this to be explained? Evidently even before his death Marullus' labours on Lucretius were known; and probably there were more copies than one of these, the one not always agreeing with the other. On this point compare notes 1 to I 551—627, where Candidus makes some perverse transpositions of verses, on the authority of Marullus he says in his note at the end; but the learned annotator of one of the Laurentian mss. states that some put 551—564 after 576, and adds 'verum Marullo parum referre videtur quomodo legatur'. This annotator and Avancius Pius Candidus Gifanius can hardly all have had the same copy: perhaps all were different. Avancius then may have had his notes in the very copy of Ven. on which he formed his text; and may have looked on them as public property which he might make use of without acknowledgment according to the practice of the time; for neither Pius nor Candidus acknowledges in his turn what he got from Avancius; nor does Naugerius the editor of Ald. 2 say a syllable of Candidus whose edition he copied with few variations.

But Lachmann to III 98 cites in proof of his charge that Avancius was a dishonest plagiary three interpolated verses which doubtless were composed by Marullus and are corruptly given in Ald. 1. In notes 1 to III 98 I have attempted to shew from Gifanius that Marullus perhaps wrote *putarit*, and that Avancius intended to read the same: Avancius was probably as good a Latin scholar as Marullus, if less versed in Lucretius. In the line inserted after IV 102 *multae* for *multas* may be an error of the printer or an oversight of Avancius. In that inserted after IV 532 there can be little doubt that he purposely wrote *suis*, imagining that *oris* was a plural. The correcting of texts was then in its infancy, and Avancius had so grievous a task before him in making sense out of the monstrously corrupted Venice edition, that much must in fairness be excused: we cannot tell what were the exact relations between him and Aldus and his printers. At the end of his Catullus published two years later he has taken occasion to give four pages of Lucretian criticism, in which he has proposed many excellent alterations of his former text, though I do not find that any editor before me

has noticed these which are very important for his reputation: see notes 1 to II 422 and other passages. The inference then I draw from all this is that both Avancius and Marullus did much for Lucretius, Marullus doubtless more than Avancius; that much which is peculiar to the Juntine is not from Marullus, and much of what Marullus did is not in the Juntine. Between them they vastly improved a grievously corrupt text; and though they introduced many perversities, we ought in simple justice to take into consideration only what is good. In my notes for obvious reasons, when Ald. 1 and Junt. agree in a reading, I mention both; when a reading is peculiar to Ald. 1, I assign it to Avancius by name; when it first appears in Junt., I still say Junt., though it is always to be inferred that the best readings are most likely due to Marullus. By assigning to him all alike one would often be doing him less, sometimes more than justice.

[In my second edition however I was able to throw fresh light on the history and criticism of Lucretius' text by the undoubted corrections of Pontanus and Marullus, still existing among the books and manuscripts of Peter Victorius which have formed for centuries so valuable a portion of the Munich library. They were examined by me and copied out in the summer of 1865, my attention having been directed to them by a Goettingen program of Prof. Sauppe. The learned writer informs us that he had examined the Munich ms. of Lucretius and found it corrected throughout by some Italian scholar. Where Candidus the editor of the Juntine mentions in his note a reading of Marullus, this reading invariably appeared among these corrections. From this and other indications he concluded, and the conclusion seemed most reasonable, that these were the very corrections of Marullus which Candidus had used for his edition. He makes the probable suggestion that the long connexion of Victorius with the Giuntas would readily explain his possession of a manuscript which had belonged to that firm.

At Munich through the courtesy of the librarian I had the full use of the following important documents: 1. the manuscript just mentioned: 2. a copy of the Venice edition of 1495 with corrections by Pontanus in the handwriting of Victorius who describes them in the first page as 'emendationes ex Pontani codice testantis ipsum ingenio eas exprompsisse': 3. another copy of the same edition likewise corrected throughout by the hand of Victorius who says at the end 'contuli cum duobus codicibus, altero Ioviani Pontani, altero vero Marulli poetae Bizantii, impressis quidem, sed ab ipsis non incuriose, ut patet, emendatis, quos commodum accepi ab Andrea Cambano patritio Florentino M.D.XX. Idibus Martiis. Petrus Victorius'. What the printed edition was from which he copied these emendations of Marullus I do not know: very likely it was this Venice edition itself which must have had a large circulation and was the very edition containing Marullus' notes which

Gifanius made use of, as has been already told. Victorius says of *grando* in v 1192 '*glando* in Pont. libro': now since not only the Venice edition, but the Verona and first Aldine have *grando*, and also the Brescian as I learn from Earl Spencer's librarian, Pontanus must have used some printed edition now unknown. The pains which so eminent a scholar as Victorius has taken in copying out twice the emendations of Pontanus and once those of Marullus would prove the high estimation in which those two learned men must have been held when he was a young man of twenty. As he has also filled a copy of the Juntine with long parallel passages from the Greek, he must himself at one time have contemplated an elaborate edition of the poet and has to be added to the long list of scholars with whom this remained an unaccomplished design.

We have then an undoubted copy of what Pontanus himself asserted to be his own original emendations; and as they are accurately repeated by Victorius in his second copy, if we subtract these we have in what remains the undoubted corrections of Marullus. Now the latter with only a few variations, easily to be accounted for as being earlier thoughts or in other ways, all reappear among the alterations of the Munich ms. which are however much more numerous. When we consider all this, and remember that wherever Candidus in his notes mentions the name of Marullus, the reading which he assigns to him is found here; that he tells us in his preface his text is grounded mainly on the revisions of Pontanus and Marullus, the latter more especially; that, as the present edition will demonstrate, the numerous readings which first appear in the Juntine, good bad and indifferent, where not taken from what we now know to be those of Pontanus, nearly always agree with the corrections of this manuscript; and finally that Candidus not unfrequently gives a new reading peculiar to this of all manuscripts known to me, as in his note to v 826 where he mentions *pariendo* as a variation, we may fairly conclude that Candidus in preparing his text had the use of this corrected manuscript, and that the corrector was Marullus. It would be natural too to conclude that this is his own copy amended by his own hand; and for the most part I do not doubt that this is so. However they cannot all have been written at the same time, as the ink differs in different places; and as so many of the emendations agree with those of Pontanus, it seems not improbable that the ms. was in his possession before it came into the hands of Marullus. As the Italian handwritings of that age resemble each other so much, at least to our eyes, the writing of the pupil may not have differed much from that of the master. However that may be, we must conclude that the corrections common to both belong to Pontanus, as he was the elder and we saw above that he claims them for his own, and the scholar would naturally borrow from the master. The emendations too of Pontanus, valuable as many of them are, have

the appearance of being earlier and more rudimentary than those of the other: he not unfrequently too sees that something is wanting and says 'fragmentum', where the latter supplies a whole verse with more or less success. The scholar therefore completed what the master commenced; and the emendation of Lucretius links their names together not less honourably than does the verse we quoted from Ariosto. Upon the whole this fresh information has greatly raised my estimate of both, especially of Marullus. His industry is at least as conspicuous as his sagacity: he has evidently carefully collated manuscripts and editions and gathered materials from all accessible sources. Throughout the poem the many verses omitted in the Munich manuscript are supplied with unfailing diligence. He evidently was acquainted with several of the existing Florentine manuscripts; among others that of Niccoli I believe, as well as that of his enemy Politian, and Flor. 31 whose readings Lachmann so strangely assigns to the notary Antonius Marii. Upon the whole he must be placed as an amender of Lucretius immediately after Lambinus and Lachmann, if not indeed in the same front rank, when we consider the circumstances of his age and the imperfection of his materials; and Pontanus perhaps may rank after him. Lambinus, as well as Avancius and Naugerius editor of the second Aldine, must have had access to some copy of Pontanus' corrections.

What I said of Marullus in my first edition with much more imperfect materials from which to draw conclusions, I find now confirmed in essential points. There were in circulation different copies of Marullus' emendations; Gifanius had access to one of these: see notes 1 to I 274 IV 1005, as well as II 16 125 465 III 994 V 201 1151 VI 25: what I inferred from his own poems is borne out by II 719 and 749 and some other passages: the assertion of Crinitus quoted above that Marullus had corrupted VI 651 652 is fully confirmed here: Marullus for the correct *multesima* most unskilfully proposes *multa extima*; and for *tota* reads *sit*: the latter Candidus adopts. In other cases his more mature judgment as seen in the Munich manuscript doubtless differed from his earlier notions. A man who studied Lucretius so long and earnestly cannot fail to have often changed his mind on further reflexion and with new sources of information. Candidus does not by any means follow Pontanus or Marullus in his orthography: that is formed as I proved in my first edition mainly on Avancius. In many cases they might have taught him better; to avoid for instance such embellishments as his *amneis*, *virenteis*. He rightly however avoids such barbarisms as the *hymbres* and *sylva* of Marullus. From *succus littus arctus* and the like, which the latter carefully introduces, we may infer that he and Pontanus had some share in bringing such corruptions into common use. The careful collation which I have given in this edition of the emendations of Pontanus and Marullus will prove their importance, and shew how rash

and unfounded Lachmann's procedure is in assigning everything that is new in the Juntine to Marullus: even in the many instances where he and I are in agreement, it must be remembered that he speaks without authority, while I possess the testimony of Marullus himself.]

The Juntine closes the first great epoch of improvement in the text of Lucretius: the second Aldine edited by the well-known scholar Andrew Naugerius and dated 'mense ianuario M.D.XV.' is for the most part a mere reprint of it without however one word of acknowledgment according to the usage of the time. Yet the changes are not few, mostly for the better, not always: two instances are given above from the first page, the one a gross corruption, the other a right rejection of an interpolation. For the next fifty years Ald. 2 appears to have been the model edition. Gryphius of Lyons published several texts, three of which I have before me: they generally follow Naugerius, but not always, often recurring to Avancius. Those of 1534 and 1540 have many marginal readings, most of them taken from Avancius or the notes of Pius, a few from sources not known to me: see notes 1 to I 977 *officiatque*. Yet even these two editions do not always agree with each other.

Little advance however was made on the Juntine before Dionysius Lambinus. He dates his address to Charles IX 1 November 1563 and afterwards speaks of his first edition as published in that year; though the title-page of my copy has 1564. Lambinus was among the most illustrious of the great Latin scholars who studied and taught at Paris in the sixteenth century. His knowledge of Cicero and the older Latin writers as well as the Augustan poets has never been surpassed and rarely equalled. Whoever doubts that the nicest critical and grammatical questions can be expressed in Ciceronian Latin without effort or affectation, let him study the commentaries of Lambinus. Scaliger says of him 'Latine et Romane loquebatur optimeque scribebat': his ease and readiness are astonishing. He made use he tells us of five mss.: four of these appear to have been Italian mss. of the fifteenth century: the fifth, of which he used a collation by Turnebus, and which he calls the Bertinian, was the same as the Leyden quarto. In his preface and throughout the work he acknowledges his obligations to Turnebus and Auratus. His Lucretius is perhaps the greatest of his works: there was more to be done here, and therefore he has done more. He had moreover a peculiar admiration for this author, of whom in the preface to his third edition he says 'omnium poetarum Latinorum qui hodie exstant et qui ad nostram aetatem pervenerunt elegantissimus et purissimus, idemque gravissimus atque ornatissimus Lucretius est'. If his boast that he has restored the text in 800 places goes beyond the truth, though I am not sure that it does, yet the superiority of his over all preceding texts can scarcely be exaggerated; for the quickness of his intellect united with his exquisite knowledge of the language gave him great power in

the field of conjecture, and for nearly three centuries his remained the standard text. Lachmann says he did much less than Marullus. But so far as there is truth in this, it is merely saying that the one lived before the other: nine tenths of what Marullus effected, Lambinus could have done currente calamo; but I doubt whether Marullus could have accomplished one tenth of what Lambinus succeeded in doing. Lachmann accuses him of strange levity and rashness. But it must be remembered that in a short life he got through an amazing amount of work in conformity with the wants of his age. He only gave two years and a half to his brilliant edition of the whole of Cicero: and probably did not spend many more months on his Lucretius than Lachmann spent years. Nor was it possible in that age even for a Lambinus to apprehend the true relation of the mss. of Lucretius to one another. His copious explanatory and illustrative commentary however calls for unqualified eulogy, and has remained down to the present day the great original storehouse, from which all have borrowed who have done anything of value for the elucidation of their author. Scaliger says 'Lambinus avoit fort peu de livres': if so he made good use of them, as his reading is as vast as it is accurate, and its results are given in a style of unsurpassed clearness and beauty. His notes observe the mean between too much and too little: he himself calls them brief, while his thankless countrymen, thinking however more perhaps of his Horace than his Lucretius, have made *lambin* and *lambiner* classical terms to express what is diffuse and tedious. A second and much smaller edition with only a few pages of notes, but with many variations from the first, was published in 1565.

Scarcely could this first edition have issued from the press, when the well-known scholar and jurisconsult Obertus Gifanius of Buren began with systematical and unprincipled cunning to pillage it and convert it to his own purposes. His Lucretius was printed by Plantin of Antwerp in 1566 as stated at the end, though of two copies before me the title-page of one has on it 1566, the other 1565, which is the date of his own address to Sambucus, and of the two privilegia at the end; for the March 1564 of the first must be old style, as it is later than the February 1565 of the second. He brought nothing new to his task, except the ms. notes of Marullus in the old Venice ed. fully spoken of above; for the emendations and readings of Antonius Goldingamus homo Anglus, which he speaks of in his preface, and the *veteres libri* and the like which occur throughout his book are mere blinds to conceal his thefts from Lambinus. The way in which he contrives at once to bestow empty praise on this scholar and yet to extenuate his merits and put him as a commentator of Lucretius on the same level with other learned men, Turnebus for instance, is a marvel of astuteness. In the preface to his third ed. Lambinus states the truth with great terseness: 'omnia

fere quae in eo Lucretio recta sunt, mea sunt; quae tamen iste aut silentio praetermittit aut maligne laudat aut sibi impudenter arrogat'. Yet so great was the skill with which all this was done that he deceived many and was thought to be a worthy rival of Lambinus. Contrary to what many believe, the age loved brief notes; and his were brief, the other's copious. Even the great critic of that generation Joseph Scaliger, who well knew the character of the man and accused him of gross deceit towards himself, says 'Gifanius estoit docte, son Lucrèce est très-bon'. Lambinus however knew the truth, and his wrath was as signal as the provocation. In 1570 he brought out a third edition greatly improved and enlarged; much of the additional matter however consists in invectives against the aggressor. In a long preface of great power and beauty of style he states his wrongs. There and throughout his commentary the whole Latin language, rich in that department, is ransacked for terms of scorn and contumely. The same charges are repeated in a hundred different shapes with curious copiousness and variety of expression. Gifanius with consistent cunning attempted no public reply to all this. Many years afterwards, when Lambinus had long been dead, a new edition of the other's book was brought out at Leyden in 1595, in which many additions are made to the brief notes, but not a word is said of the charges brought against him by Lambinus. He was rewarded for his reticence, and for a century or more opinion was divided as to whether he or Lambinus did more for Lucretius. In private he corresponded with the cankered and unhappy Muretus: the two exchanged futile charges of dishonesty against the dead critic, who was far too genuine a scholar to be capable of being a plagiary. Lachmann so stern with Avancius has nothing to say of this much more flagitious case: 'qui quo iure' he observes 'aut Lambinum aut alios compilasse dictus esset non quaesivi'. Gifanius had no business whatever to edit a poet: he was without poetical taste and grossly ignorant of metre.

For a century after Lambinus nothing was done for Lucretius: the common editions followed either Lambinus or Gifanius. In 1658 the singular labours of Gassendi were given to the world. Deeply versed in the works of the fathers and the philosophy of all ages down to the latest discoveries of Descartes he devoted himself with the zeal of a disciple to the dogmas of Epicurus. The two first of his huge folios are given to this philosophy, and a large portion of them to the exposition of Lucretius. Much that is curious may be gathered from them, and I have perused them with attention; but to say the truth I have not found much to my purpose in them. The author was utterly devoid of the critical faculty, and all that is of value in him on this head is borrowed from Lambinus; as well as the most useful of his illustrations: his corrections of the text are almost without exception worthless. In the 17th century several distinguished scholars, Salmasius J. F. Gronovius Nic. Heinsius Isaac Vossius, turned their attention to Lucretius; but their labours were only desultory. Of the ms. notes by the two last which are in my possession I will speak afterwards. In 1662 Tanaquillus Faber or Tanneguy Lefebvre published at Saumur a text of Lucretius followed by *emendationes* and *notulae*. He was a clever but vain man, who seemed to think such work rather beneath him; he takes care however to inform his readers that he spent but little time or pains on it, and had only Lambinus and Gifanius before him, though he owed nothing to either. The truth is that without Lambinus he could not have advanced a step: clever man that he is, he affords a good proof how much Latin scholarship had deteriorated in France during the century between him and Lambinus. Of Pareus, Nardius, Fayus nothing need be said.

Had Bentley in 1689 or 1690 succeeded in his efforts to obtain for the Bodleian Isaac Vossius' famous library, he might have anticipated what Lachmann did by a century and a half. As he was at that very time working hard at Lucretius, if he had once got into his hands the two mss. now at Leyden, he would at a glance have seen their importance and would scarcely have failed to complete the edition which he was then meditating. The great knowledge of Epicurus' system which he displayed two years later in his Boyle lectures and his zeal for the recently published Principia of Newton would have aided him in expounding the tenets of the poet. This however was not to be; but his marginal notes published in the Glasgow edition of Wakefield prove what he could have done, if he had gone on with his design. I cannot doubt that Lucretius would have suited him better than Horace, and offered a fairer field for the exercise of his critical divination.

In 1695 there came from the Oxford press a Lucretius edited not by Bentley, but by Thomas Creech Fellow of All Souls, a man of sound sense and good taste, but to judge from his book of somewhat arrogant and supercilious temper. The text is nearly always a reproduction of one or other of the editions of Lambinus: such criticism indeed he seems in his preface to look upon as unworthy of him. His notes are in most cases mere abridgements of those of Lambinus or copied from Faber, and his illustrations are usually borrowed from the former. All this he does as if it were a matter of course, not thinking it necessary either to avow or conceal his obligations. His *interpretatio* is his own: how far it is of assistance to a student must depend upon what he seeks for in it. His Lucretius however owing to the clearness and brevity of the notes has continued to be the popular one from that time to the present.

The worthy London bookseller Jacob Tonson published in 1712 a finely printed text with various readings at the end collected from many quarters with a great deal of trouble, some of value, most quite worthless. This I chiefly mention on account of what follows. In 1725 Sigebert Havercamp Professor at Leyden gave to the world his variorum

edition in two large volumes. Though his reputation has never been great, my readers will hardly perhaps be prepared for what I am going to say. As Professor in Leyden he had the full use of the two Vossian mss. there, the main foundation of a genuine text: how did he use this advantage, which in profession he makes so much of? The chief feature of his edition is a vast and cumbrous apparatus of various readings, derived from about thirty-one sources professedly distinct. Of these thirty-one twenty-two are simply the various readings of the London edition just mentioned which Havercamp has taken and tumbled into his own without changing the notation. Most of these are of the most futile nature, taken from worthless editions which reprint or ignorantly depart from those of Giunta, Aldus, Lambinus or Gifanius, such as that of Pareus, Gryphius, Fayus, Nardius and the French translator the Baron de Coutures: the more worthless the authority, the more fully it seems to be given. There are also some collations of the mss. of Vossius and that in the Bodleian which it did the London bookseller credit to get together. The nine remaining authorities are these: a certain Basil edition of 1531, its marginal readings, a collation of the Verona edition of 1486, also jottings in its margin from three unknown mss., a second collation of the Bodleian, and lastly the two all-important Leyden mss. The two last are the only authorities he has collated himself. How has he performed this task? he has not noted one reading in three; the most important variations he usually omits; and the readings he gives are as often wrong as right. That which he has borrowed from others and thrown in a lump into his edition is for the most part as worthless as the scribblings of a schoolboy. So incredibly careless is he, that the Vossian collations which he borrows from Tonson are or should be those of his Leyden mss.: see note 1 to v 471 for a glaring instance of a false reading which he slavishly copies from Tonson and ascribes to his Leyden quarto. Nay more the Bm of the London edition and his own X are one and the same Bodleian ms. so that we have this ludicrous result, that the same ms. is cited twice over as two independent authorities. His various readings are therefore not only cumbrously inane, but are a snare and delusion, and have led astray those who like Wakefield have trusted to them. Thus in his hands the two unrivalled Leyden mss. have been worse than useless. What he does himself is always worse done than what he borrows from others, poor as that generally is: he has collated none of the old editions except the Verona, and that was done for him, and better done than he would have done it for himself. Nor are his explanatory notes much better: he has heaped together in a crude mass those of the chief editors; but except in the case of Virgil and Horace and one or two others of the best known poets, indexes to which are in everybody's hands, he has not even supplied the references to Lambinus' learned notes who from the circumstances of his age could not himself furnish them; nay in one case he has given Lambinus' own words as those of Cicero. In his two bulky volumes there is not one week's genuine work beyond what scissors and paste could do: seldom has performance fallen so far short of profession and opportunity.

There is nothing to detain us between Havercamp and Wakefield who in 1796 and 1797 gave his three volumes to the world, rivalling the other's in magnitude. Yet the work, such as it is, is his own, and is not a mere slothful compilation from others. Gilbert Wakefield possessed one quality which a critic can ill dispense with, that of despising any amount of authority which did not rest on some real foundation, and refusing to admit that, because a reading had appeared in edition after edition for centuries, it might by that alone claim recognition. He therefore set about a new revision which was to be based on manuscript authority alone; but neither his knowledge nor his industry nor his ability nor his taste sufficed for such a work. He professed to collate five English mss., among them our Cambridge one, and most of the old editions. This task he executed with incredible carelessness. As he had the full use of the Cambridge ms., one might have expected that his collation of it would be done with some care; but it is quite untrustworthy. From this as well as the evidence of his own notes and the nature of the case I infer that his other collations are not more to be depended upon. Had this labour been faithfully performed, it would still have been of little use, as he had no notion of the true relation of these late mss. to one another. He looked on each as an independent authority and thought he could not do wrong, if the words he put in his text were found in one or other of them. Then he had to take from Havercamp the readings of the Leyden mss., and therefore could gain no true insight into their character. As he had no knowledge of the language or philosophy of his author, he undertook to explain whatever words he put into his text in long turgid notes of unmeaning verbiage. His work was got through with a strange precipitancy: when engaged on the first part, he had never read the other parts of the poem; when he came to them, he had forgotten what went before. Morbidly vain and utterly unconscious of the immeasureable distance between Lambinus and himself, he assails the most brilliant and certain emendations of the unrivalled scholar in a hideous jargon and with a vehemence of abuse that would be too great even for his own errors. Thus by some fatality or other, by its falling into the hands of a Gifanius Havercamp Wakefield instead of those of a Salmasius Gronovius Heinsius Bentley, the criticism of Lucretius remained for centuries where it had been left by Lambinus, nay even retrograded. And yet Wakefield did display occasional flashes of native genius, and our notes will shew that not a few certain corrections are due to him; but from the first to

the last of his 1200 quarto pages there is not a single explanation of the words or philosophy of his author for which a schoolboy would thank him: so incurably inaccurate and illogical was his mind. Yet owing to the boldness with which he asserted his pretensions he was thought even by scholars to have done something great for his author: he received complimentary letters from Heyne and Jacobs, 'hominibus modestis et ab omni iudicii subtilitate abhorrentibus'; and more than thirty years afterwards Forbiger in preparing his compilation for the use of the general public took him for his supreme authority. Even later than that so great a scholar as Ph. Wagner often appeals to him in his notes to Virgil. But though long in coming the avenger was to be.

Already in 1832 Madvig in a short academical program, afterwards republished among his opuscula, exposed the futility of Wakefield's criticism and gave some intimations of the right course to pursue. Stimulated by his example more than one scholar followed up the attack. The most important contribution of this kind was made by Jacob Bernays in an article printed in the Rhenish Museum of 1847. This able paper would have produced a greater effect than it did, if it had not been so soon superseded by Lachmann's more complete and systematical work. This illustrious scholar great in so many departments of philology, sacred, classical and Teutonic, seems to have looked upon Latin poetry as his peculiar province. Lucretius his greatest work was the main occupation of the last five years of his life, from the autumn of 1845 to November 1850. Fortunately he had the full use for many months of the two Leyden mss. His native sagacity, guided and sharpened by long and varied experience, saw at a glance their relations to each other and to the original from which they were derived, and made clear the arbitrary way in which the common texts had been constructed. His zeal warming as he advanced, one truth after another revealed itself to him, so that at length he obtained by successive steps a clear insight into the condition in which the poem left the hands of its author in the most essential points. Like many other great scholars he seems to have kept few or no common-place books. Resolved to master his subject he perused the grammarians and poets and nearly the whole of the older writers in order to illustrate Lucretius through them and them by Lucretius, and the Latin language by all. He had an almost unequalled power of grasping a subject in its widest extent and filling up the minutest details. One mark of a great original critic, which eminently belongs to Lachmann, is this: even when wrong, he puts into your hands the best weapons for refuting himself, and by going astray makes the right path easier for others to find. Another test is this, when his influence extends far beyond his immediate author. Now hardly any work of merit has appeared in Germany since Lachmann's Lucretius in any branch of Latin literature without bearing on every page the impress

of his example. When he is better known in England, the same result will follow here. Though his Latin style is eminently clear lively and appropriate, yet from his aim never to throw away words, as well as from a mental peculiarity of his, that he only cared to be understood by those whom he thought worthy to understand him, he is often obscure and oracular on a first reading. Had his commentary been twice the length it is, it would have been easier to master. But when once fully apprehended his words are not soon forgotten. His love for merit of all kinds incites in him a zeal to do justice to all the old scholars who have done anything for his author; while his scorn and hatred of boastful ignorance and ignoble sloth compel him to denounce those whom he convicts of these offences. In one instance, that of Forbiger, this sternness passes into ferocity: most of his errors that scholar could hardly avoid in the circumstances in which he was placed.

Hermann warns us, when we disagree with Lachmann, to think twice lest we, not he, be in fault. His defects however must not be passed over. While the most essential part of his work, the collation of the two Leyden mss., has been performed with admirable skill and industry, he has not been so happy in the use of secondary evidence, that of the Italian mss. and the older editions. Much he has taken on trust on insufficient evidence, and much that he had before him he has not always accurately used. Some proofs of this have been given, more will be seen below. But a still more serious defect must be told: he meant his book to be a critical revision of the text, and left to others the task of explaining and illustrating the meaning. So far good: but as the text of an author in the condition of that of Lucretius cannot be always rightly constructed without a sufficient knowledge of his system and its literature, he has not unfrequently strangely blundered and grossly corrupted the poet's words: for examples of this see I 599—634 II 522—529 1010 foll. V 513—516. His consummate knowledge of the Latin language as well as of the manner of Lucretius in particular enables him often to amend his author with great success. As he wishes too to produce, where it is possible, an intelligible text, many of his corrections he must himself have looked upon as only provisional. Yet his greatest admirers must concede that he has not Madvig's 'curiosa felicitas' in emendation. He has however achieved a work which will be a landmark for scholars as long as the Latin language continues to be studied, a work, *perfidiae quod post nulla arguet aetas*.

Jacob Bernays in 1852 edited a text of Lucretius for the Teubner series. There can be little doubt that carried away by the strength of his admiration for Lachmann he has followed him too faithfully; yet he not unfrequently differs from him. Where he recalls the old reading he is generally right; where he deserts him for a conjecture of his own, he is often very successful. Had he prepared a more elaborate edition, as

he appears to have once had thoughts of doing, there is no doubt that Lucretius would have owed him much. The impulse given by Lachmann to the study of our poet has called forth numerous papers either inserted in the German philological reviews or published by themselves. Some are of more, some of less importance: my notes will shew where I have been indebted to them. One English publication of eminent merit, as it criticises not the text of the poem, but its matter and poetical beauties, shall be mentioned elsewhere.

To return now to the manuscripts whose history was sketched above. Though I examined the two at Leyden for some days so long ago as the autumn of 1849, what will now be said of them is borrowed from Lachmann who had them in his hands for six months and during that time applied the whole force of his practised and penetrating intellect to unravelling all their difficulties and obscurities. Both, as already mentioned, belonged to the magnificent collection of Isaac Vossius. The older and better of the two is of the ninth century written in a clear and beautiful hand: I call it A. It has been corrected by two scribes at the time that the ms. was written, as Lachmann tells us. One of these is of great importance: in most essential points he agrees minutely with the ms. of Niccoli, the oldest of the Italian mss.; and doubtless therefore gives the reading of the archetype. It will be seen in notes 1 how often I make the united testimony of A and Niccoli to outweigh all the rest. The other Leyden ms. which I call B is of nearly equal importance: it is of quarto size closely written in double columns, apparently in the tenth century. It is probable that it and the ms. next to be mentioned were copied from some copy of the archetype, not like A from the archetype itself. Four portions of the poem are omitted in their place, but come together at the end in this order, II 757—806 V 928—979 I 734—785 II 253—304. Lachmann has demonstrated that these sections formed each an entire leaf of the lost archetype: 16 29 39 115 are the numbers of these leaves. It is manifest then that after A was copied, these leaves of the archetype had fallen out of their places and been put together without order at the end, before B, or the original of B, was copied from it. More will be said on this point presently. B has had several correctors, but all of the 15th century; one a very brilliant critic for his age, to whom are due many of the finest emendations in the poem, as will be seen in notes 1. This ms. was once in the great monastery of St. Bertin near St. Omer. Turnebus collated it in Paris and his collation as we saw was used with much effect by Lambinus: it afterwards came into the possession of Gerard John Vossius, Isaac's father. A large fragment of another ms. closely resembling B in everything double columns and all, except that it is said to be a small folio, not quarto in shape, is now at Copenhagen: it contains book I and II down to 456, omitting however the same sections as B, viz. I 734—785 and II 253—

304, and doubtless for the same reasons, because copied from the same ms. from which B was taken. It usually goes by the name of the Gottorpian fragment from the place where it once was. I have three collations of it, one published by Henrichsen in 1846, another in the handwriting of Nic. Heinsius, another in that of Isaac Vossius. Formerly it had a very high reputation: in truth it much resembles, but is more carelessly written than B, and is seldom of much use, except once or twice to confirm A against B. Strangely enough there are in the Vienna library fragments of a precisely similar ms. containing large portions of the later books, viz. II 642 to III 621 inclusive, omitting however in the proper place II 757—806 exactly as B does; then VI 743 to the end; then follow, precisely as in B, the four omitted portions given above, proving this to be copied from the ms. from which B was taken. Naturally enough these Vienna fragments were assumed to belong to one and the same ms. as the Gottorpian; but Dr. Ed. Goebel, from whom I have borrowed this description of them, seems to prove in the Rhenish Mus. n. s. XII p. 449 foll. that the two portions now bound together are of different sizes and belonged to different mss. However that may be, the former part seems to be the same ms. as the Gottorpian, and the other if not the same, is precisely the same in internal character; and in either case is of the same, that is of very little value. Probably therefore a more accurate collation would hardly repay the labour.

All other mss. known to exist were, as has been already said, copied mediately or immediately from Poggio's lost ms. which must have resembled A almost as closely as the Gottorpian resembles B. The most important are among the eight preserved at Florence in the Laurentian library, numbered 25 26 27 28 29 30 31 32 of desk XXXV. 30 was written by Nicolò Niccoli himself, who had Poggio's ms. so long in his possession: this we are told in the learned Mehus' preface to his life of Traversarius p. L. As he studied so many of Niccoli's manuscript letters, he must have known his writing better than anybody else. There are many corrections in a much later hand, but Niccoli himself seems on the whole to have copied Poggio's ms. faithfully, and not to have made many changes. His ms. therefore, as will be seen in notes 1, is of great value in deciding between A and B. It is unfortunate that Lachmann could make no use of it: I collated it with some care in the summer of 1851: the old Verona and Venice editions have a text closely resembling Niccoli's. 31 is next in importance to 30, but of a widely different character, having a text much more corrected than Niccoli's or even Ver. and Ven. It is clearly written and in excellent preservation, and much resembles in general character the manuscript in our public library which I had open before me all the time I was composing notes 1, and which is as well preserved and as distinctly written as the other. It excels the Cambridge on the whole, though the latter has many good corrections not in

the other. These two therefore I have used as good examples of corrected codices. From whom come the many excellent emendations contained in these mss. is quite unknown. Lachmann used a not very complete collation of Flor. 31, and to it he attributes the corrections which it has for the most part in common with the Cambridge and doubtless some other mss. Having been told too by H. Keil from whom he got the collation that it was written by Antonius Marii filius, he fills his commentary from one end to the other with the name of this worthy Florentine notary. I can only say that I compared it with ten or more voluminous mss. written in magnificent style and signed by this man between 1420 and 1451 all closely resembling each other; and neither in general appearance nor in the form of particular letters nor in their abbreviations have they any resemblance to the ms. of Lucretius. This scribe's name therefore I have excluded from my notes. Of the other Laurentian mss. 29 is to be noticed for the marginal annotations of Angelo Politian spoken of above and often referred to in notes 1: it twice over has this note 'liber conventus Sancti Marci de Florentia ordinis Praedicatorum habitus a publicis sectoribus pro libris quos sibi ab eodem conventu commodatos Angelus Politianus amisit seu qui in morte Angeli Politiani amissi sunt'. 32 has some learned marginal remarks on the first book from which I have derived some facts about Marullus. The six mss. of the Vatican I collated as long ago as the autumn of 1849, but not with much care or skill; yet it will be seen from notes 1 that they have been of considerable service to me: their marks are as follows, 3275 and 3276 Vatic. 640 Urbin. 1136 and 1954 Othobon. and 1706 Regin., at the bottom of the first page of which are the words 'Nicolai Heinsii'.

As further helps I have had Gifanius' ed. of 1595 with ms. notes by Nic. Heinsius which I bought from H. G. Bohn many years ago: it will be seen that I have derived from it some valuable emendations not in Heinsius' adversaria nor elsewhere so far as I know. It has also a complete collation of A all through, of B in the first four books, and of the Gottorpian fragment. It contains too a complete collation of the codex Modii, which Heinsius denotes by *s*: he says of it 'variantes lectiones excerptae sunt ex libello edito Paris. an. 1565 quem Fr. Modius cum ms. suo contulit, ut ipse testatur fine lib. I inquiens: *Collatus cum ms. meo 26 Junii* 1579 *Coloniae*': it was lent to Heinsius by Liraeus; Liraeus had it from Gruter, Gruter from Nansius, Nansius from Modius himself. Heinsius says 'codex Modii non est idem cum B Vossiano, nam pag. 8 [I 227] ubi ex Modiano notatum *ad lumina*, Vossianus *in*'. Heinsius speaks I presume of the small 2nd ed. of Lambinus, as the one which Modius used: it has like others *in lumina*: if then Modius' codex is B, either he or Heinsius has made a gross mistake. I have noticed several other instances, where *s* is made to differ from B; but in these cases Lambinus' 2nd ed. has the reading which Heinsius gives to *s*, so that

Heinsius may have here been misled by Modius' negligence. It would seem certainly that *s* and B are the same: if they are two, then their agreement is very extraordinary, much closer than that between B and the Gottorpian fragment.

I also possess a copy of Faber's Lucretius with a poor collation of A and B and the Gottorp. as well as many other notes and illustrations in the writing of Isaac Vossius. Havercamp had a copy of the same notes, but has employed them with his usual carelessness. Notes 1 will show what important use I have made of them: they have enabled me to strip him of several of the most showy feathers with which he had decked himself either from negligence or worse. Spengel, Christ, Goebel and some others have in various journals and publications made much ado about a codex Victorianus as they call it, once belonging to P. Victorius, now in the Munich library, as if it were a rival, or nearly so, of A and B. From the readings cited I see clearly that it is a common Italian fifteenth century ms. neither better nor worse than twenty others, much resembling the Verona and Venice editions and of no importance whatever. [As the reader has been already told, I examined this manuscript myself at Munich during the summer of 1865 and can confidently affirm that what I said of it is the truth. It is much interpolated: its corrections are not so valuable as those of Flor. 31 or I think of our Cambridge manuscript. I have recorded some of its readings in my critical notes under the term 'Mon.', and have occasionally spoken of it as the codex Victorii. Strange that learned men should have taken so much trouble about its own readings and said not a word of the much more important emendations of Marullus which it contains. This is not the case with Prof. Sauppe in the program spoken of above; but I cannot help citing from its first page a few lines which I read with no slight surprise: 'unum addo, quod ab aliis nondum quod sciam animadversum coniecturam de victoriani codicis origine propositam valde confirmet. Post l. 3 enim v. 360 versus novem scripti sunt, quos delendos esse homo quidam doctissimus in margine monuit, qui versus 403—411 per errorem hic illatos esse vidisset. ratione autem subducta inter v. 360 et 403 versus bis vicenos senos interpositos esse invenimus, ut facile intelligamus in singulis archetypi paginis versus vicenos senos scriptos fuisse eiusque inter scribendum cum unum vellet scriptorem victoriani duo folia vertisse. in archetypo vero oblongi C. Lachmannus ostendit p. 3. 49. 233. aliis locis eandem versuum rationem fuisse'. Probably before this time the learned writer will have discovered that his arithmetic is at fault and that he has counted forty-two as fifty-two; and that his theory is thus entirely upset. But it is not for such a trifle as that, that I have quoted his words. Does he really mean to assert that this Munich is not like every other fifteenth century ms. a descendant of the one brought into Italy by Poggio? that the long lost archetype was preserved by some mysterious

intervention for the special use of the copyist of this codex? Again I would ask whether he looks upon the laborious and sagacious calculations, by which Lachmann demonstrated the number of pages in the lost archetype and the number of verses in each page, as a mere plaything thus to be trifled with; and not rather as a key to unlock many secrets of criticism and not to be understood even without some slight effort of mind. I beg to tell him that the number of lines in the archetype between III 360 and 403 was not either 52 or 42, but 44; that is to say 42 verses of the poem + two headings: and that III 360 did not commence, nor III 402 terminate a leaf; but that III 360 was the fifth line of page 108 of the archetype, and III 402 was the fourth line from the bottom of page 109. Further study too will perhaps make him regret that he has put the unfortunate paragraphs between I 503 and 634 to a fresh torture, and permit him to see that in no part of the poem is the argument or text in a sounder state.—But even while revising the 2nd ed. for the press I found in a recent program by Th. Bergk, with the name of Ed. Heine on the title-page, a fresh attempt to magnify this much vexed Victorian codex: in p. XIV it is said that it 'solus iusto ordine exhibet libro IV locum antiquitus archetypi schedae paginis inversis perturbatum: nam post v. 298 *Atque ea continuo* sequuntur v. 323 *Servet.* ...347 *Ac resilire,* tum v. 299 *Splendida*...322 *Quae sita sunt,* denique v. 348 *Quod contra.* hoc igitur insigne est virtutis documentum, atque possit aliquis inde colligere librum Poggianum ex archetypo descriptum esse, antequam illae paginae inversae sunt' etc. Is it not strange that so definite an assertion should be printed, when in truth this manuscript has the verses in just the same inverted order, in which they are given by the Leyden and all other known mss.? Nay more the corrector (Marullus without doubt) arranges the disordered lines, whether after Politian or not, exactly as Candidus does in the Juntine, who beyond any question adopted his arrangement from this manuscript. And yet the main purpose of the program spoken of is to prove Marullus not to be the corrector of this Victorian codex, and to prove it from this very passage!] It will be seen that by the materials which I have collected and just described I have in many important cases got nearer than has been done before to the readings of Poggio's ms. which was a worthy rival of the Leyden two.

But Lachmann's long experience and disciplined acuteness have enabled him to go beyond existing mss. and to tell us much of the lost archetype, as I call it after him, of all existing mss. Notes 1 will shew that many difficulties are cleared up by this knowledge. This archetype then, though it is not certain that even A was immediately taken from it, was written in thin capitals, like the medicean of Virgil; the words were not separated, but in the middle of verses points were put at the end of clauses. Ancient mss. as a rule keep with singular care to the

same number of lines in a page: ours had 26 lines in a page, excepting only those which concluded a book. But remember there was a heading or title at the beginning of each section; and each of these headings occupied a line. Lachmann brings many proofs of this being the number. When this ms. was copied, it was clearly much torn and mutilated. It was stated above that four portions, omitted in their place by B, come together at the end, and that these each formed a leaf of the archetype which had fallen out of its proper place. Each of these alone or with its headings consists of 52 lines. Then turn to note 1 on IV 299—347 (323—347 299—322) where this inversion is explained in the same way, by the accident that is of a loose leaf being turned the wrong way: see also note 1 to I 1068—1075 and 1094—1101, where the mutilation is accounted for in the same manner. Thus we obtain six certain landmarks in different parts of the poem. The archetype therefore consisted of 300 pages, or admitting, as seems to be an undoubted fact, that a whole leaf is lost between VI 839 and 840, of 302; of which the first was not written upon, as well as one for some reason or other somewhere between I 785, which ends one of the loose leaves at the end of B, and 1068 which, as shewn in note 1, begins a fresh leaf. Page 190 which followed the end of IV was left blank. I may also note that pp. 137 and 191 contained an index of the headings of IV and V respectively, while the headings of VI are crowded into the lower part of p. 249, the upper part of which contained the last 13 lines of the text of V: see Lach. p. 398: although the different titles come in their places in these books too, as well as in the first three which have no such index prefixed. Having made for myself a list of these pages after the rules stated in various places by Lachmann, I have found it of great use; as the ends of lines throughout the poem towards the bottom of the several right-hand pages had been specially exposed to mutilation in the damaged archetype. Verses also omitted in their proper places were apt in this as in other mss. to be put afterwards at the bottom of pages. Besides the injuries which it had received from accident or ill usage, our archetype must have been carelessly enough written, though A and B prove that it retained many valuable vestiges of great antiquity, especially in the spelling of words, and though there may have been few stages between it and the age of the author. There is one point, the nature of the hiatus after IV 126, as to which it is not easy to accept Lachmann's theory. That there is a hiatus there, is indisputable and the special questions connected with it are fully discussed in note 1 to that passage. As the accidental loss of a whole leaf would not suit his system of pages, he boldly declares that twenty-five verses and one heading have perished, that is one single page of our archetype. Now it is easy enough, as we have seen, to explain the accidental loss of a leaf, by which every subsequent copy must necessarily want the contents of that leaf: it is easy

enough to conceive any one ms., A or B or Poggio's, passing over by mistake one whole page. But it is in the highest degree unlikely that different copies, A B and Poggio's, neither of which as Lachmann admits was copied from the other, should all pass over a single page of their original; or that this single page should be wholly illegible, while that which preceded and the reverse page of the same leaf should be entirely uninjured. It seems to me therefore much more natural to assume that our archetype or one of its predecessors accidentally omitted an uncertain number of verses; or rather that a whole leaf of the archetype had been lost, as after VI 839. Lachmann's system of pagination would then be set right in this way: only books IV and V have an *index capitum* prefixed filling one page; for that of VI as I have said is crammed into the lower part of the last page of V: before this index in V Lachmann has shewn that the archetype had one blank page. Assume now that one page was similarly left blank before the index of IV and all will be right: the pages of the archetype would then be raised to 304. The *index capitum* prefixed to VI I accidentally omitted to notice in former editions, as it had no bearing on the question of pages. The assumption here made which is commended by Mr Polle, but blamed by Mr Susemihl in philolog. XXIX p. 427 foll., I still think probable. The latter asks what conceivable reason there could have been for the two blank pages before V, except to begin the new book with a new leaf, as was done with all the rest. Why, I which had no index prefixed began on the second page of a leaf; so did III, which had no such index; so did VI whose index is crowded together in the manner spoken of. Other mss. such as the medicean of Virgil, seem to have no preference for beginning a book on a new leaf. Why the two pages were left for the index between IV and V I do not know, any more than why a page was left vacant somewhere between I 785 and 1068: it had something to do perhaps with calculations about the parchment required. I was going to say more, but forbear to enlarge on so fruitless a topic.

But we are able to advance even beyond the archetype: in many parts of the poem there are manifest undoubted interpolations, which must have been inserted by some reader who wished at one time to confirm what is said, at another to convict it of inconsistency and the like. Generally, not always, these passages are repetitions of genuine passages; sometimes they consist of several, sometimes of a single verse: I 44—49 and III 806—818 are good and incontrovertible examples. But enough is said of these throughout our notes. Lachmann however still unsatisfied has not paused even here, but has gone up to the very times of the poet. No careful reader will refuse to admit that he has proved not a few passages, some of them among the finest in the poem, to have been subsequent additions made by the author, which he did not live to embody properly with the rest of his work. Lachmann has gone too far; and unless I err, I have shewn that not a few sections thus marked by him are properly connected with what precedes and follows. Yet it is certain that his theory applies to II 165—183, and more than one long paragraph of IV V and VI. It has been shewn sufficiently in the notes to these passages that the most important of them have a close connexion in matter and manner with each other. Like Lachmann, I have marked them off by [ ]. All through the poem many single verses and passages of some length are designedly repeated by the poet, some of them again and again. It is probable that he would have removed many of them, if he had lived to revise his work: the exordium of IV for instance could hardly have been left.

Some readers may be surprised at the number of verses which have been transposed in the poem; but they should remember that every ancient writing which depends finally on one ms. is in a similar plight. When a scribe omitted by accident a verse, in order not to spoil the look of his book, he wrote it at once after the next verse, if he immediately discovered his error; if not, he omitted it altogether, or added it in some other place, often at the bottom of a page; he would then affix an *a*, *b* to mark the right order; the next scribe would not notice or would purposely omit these and so on: see Bentl. to Hor. ars 46. Every one of these errors has been committed again and again by the copyists of our poem. Most of these transpositions are certain and were made long ago by Lambinus Marullus Avancius and others; many were first made by Lachmann. Some of these I have not followed: not a few I have first ventured on myself. But connected with this question I must draw attention to one point which seems of importance. You would expect as a rule single verses to be thus transposed; and this is the case in Lucretius' mss. as in those of other writers: sometimes too one or more verses are repeated after the misplaced verse, which ought to follow it in its proper place, as if to shew the reader whither it ought to be transferred: comp. IV 991 i.e. 999 of the mss. followed in them by 1000—1003, which are only the vss. which follow it in its right place repeated after it in its wrong place: see also V 570 (573) and what comes after. But besides such usual instances of transposition there are throughout the poem many small groups of verses, forming generally sentences complete in themselves, which have got quite out of their right place: comp. I 984—987 (998—1001), II 652—657 (655—659 680) and IV 1227 1228 (1225 1226), three passages first transposed by me; also II 1139—1142, 1168—1170, III 686—690, IV 50—52, V 174 175, 1127 1128. Now that a scribe should so often transpose several consecutive verses always forming an entire and independent sentence by mere casual carelessness, is to me in the highest degree improbable. Again most of these passages read to me like possible additions not necessary to the context, though they improve it. I believe them then to be marginal additions by the

poet, inserted on the same principle as the longer sections discussed above: these too the first editor, faithfully preserving everything in his copy, but not caring always to find the right place for what the author left ambiguous, has inserted out of their order. Add to these v 437—442 which the context could dispense with: these vss. are found out of place in Macrobius as in our mss. This increases the probability that they were out of their proper order from the first, two apparently independent authorities Macrobius and our archetype quoting them in the same way. Perhaps these single vss. might be added to the list, IV 202, 205, VI 957, 1225, 1237, 1270 as they might all be dispensed with. Look too at IV 129—142, so strangely disordered in the mss.: 133—135 may be all marginal additions by the author afterwards wrongly placed by the editor. The ms. arrangement of IV 299—348 has been already accounted for. If all these passages are subtracted, there will then be left a not very unusual number of single verses transposed by the ordinary negligence of copyists. The numbers occasionally given on the left hand of the page denote of course the order of the lines in mss. which Lachmann follows in his edition: where spurious vss. of the mss. are omitted from the text, he still allows them to count. For obvious reasons I have followed him in this, as he will be the future standard of comparison, and there is great advantage in a uniform numbering of the verses.

Since many special questions of orthography are noticed as they occur in the notes, I should have thought it unnecessary to say more in this place than that in essential points I follow Lachmann, if it were not for the apparent unwillingness of scholars in this country to accept even the smallest change in what they look upon as the usual or conventional rules of spelling. The notion of any uniform conventional spelling is quite a chimera: I never find two English editors following any uniform system; nay the same editor will often differ in different parts of the same book. But whence comes this 'conventional' system, so far as it does exist? from the meritorious and considering their position most successful endeavours of the Italian scholars in the fifteenth century to get rid of the frightful mass of barbarisms which the four or five preceding centuries had accumulated. They sought indeed to introduce rigorous uniformity in cases where variety was the rule of the ancients; and though these cases embraced only a few general heads, they yet comprised a great multiplicity of particular instances, because involving the terminations of cases, the assimilation of prepositions in compound verbs and the like. But where there was only one right course, they generally chose it; yet from the utter confusion into which the use of the aspirate had fallen, their own language having entirely lost it in sound, but at this time retained it in spelling; from the almost complete identity both in sound and writing of *c* and *t* before *i*, and the like, they never could tell whether *humor* or *umor*, *humerus* or *umerus*, *spatium* or

spacium, *species* or *speties* was correct; and consequently as a rule chose the wrong. Their general principles however were not accepted by the most thoughtful scholars in any age, so far at least as concerned the text of ancient authors, unless it be during a part of the present century; neither by an Avancius in the 15th nor by a Lambinus or Scaliger in the 16th nor by a Gronovius in the 17th nor by a Bentley in the 18th. Yet this system gradually established itself, because it came to be used by scholars in their own writings, some of the barbarisms being gradually eliminated; new ones however being introduced, such as *coelum coena moereo sylva caetera* for *caelum cena maereo silva cetera* in order to derive them preposterously from Greek words: Marullus, as we said above, writes *sylva* and *hymbres*.

Many attempts were made in various directions to change this state of things: the best and most systematic was that of Ph. Wagner in his orthographia Vergiliana published in 1841. With admirable industry he amassed all the evidence afforded by the medicean and, so far as it was accessible to him, of the other ancient mss. of Virgil. As these, like other old mss. are as a rule very tenacious of the true spelling in those cases where there is only one right method, he performed this part of his work with eminent success, and still remains one of the best authorities on the subject. In those other cases however referred to above, in which variety is the rule of the ancients and which include a great multitude of particular instances, he has chosen to abandon the safe ground of evidence and experience and has made Virgil write what he decided on a priori principles he must have written. This seems to me the reason why his system was not more generally followed. Still less satisfactory was Madvig's spelling in his de finibus published in 1839: it was utterly unlike that of the mss. and yet in many points it was not what Cicero used; in still more you could not be sure whether it was what he used or not. Here too Lachmann bringing into play his extraordinary 'power of asking the right question', and joining with it a minute knowledge of the whole evidence upon the subject, saw at once what could be obtained and what could not, and shaped his course accordingly. The Leyden mss. of Lucretius, imperfect in many respects, are on the whole admirable in their orthography, at least equal to any of the mss. of Virgil, confirming them in what is true and confirmed by them in turn: in some nice points, such as the frequent retention of the enclitic *st*, they far surpass them. With their aid he was able to confirm those improvements in spelling which Wagner had so well established in opposition to the system in common use. But in regard to the other class of words in which the usage of the ancients varied in different ages or even in the same age, he did not dogmatically determine what his author wrote and thus close the door to all future change; but knowing that certainty was not here attainable, he carefully sifted the evidence offered by his mss.

and made the best approximation he could to what his author might have written, always taking the most ancient form for which his authorities supplied any testimony direct or indirect. Thus the question was not foreclosed; nor were we left to vague generalities, but a firm historical groundwork was gained upon which future improvements might be built, if better evidence hereafter offered itself. Lachmann then in this, as in so many other departments of philology, seems at once to have produced conviction in the minds of the majority of the most thoughtful scholars, in Germany I mean; for in our own country most seem to scout the question as unworthy of serious attention: a great mistake; for Latin orthography is a most interesting and valuable study to those who care to examine it, and touches in a thousand points the history grammar and pronunciation of the language. Let me give two examples of the effect at once produced by Lachmann. Otto Jahn in 1843 published his elaborate edition of Persius in which he adopted throughout the spelling then in common use, though he had so many excellent mss. to guide him to a better course: in 1851, the year after Lachmann's work came out, he published the text of his Juvenal and followed in it most minutely the principles of Lachmann; and fortunately he had a most excellent authority in the codex Pithoeanus; so that the spelling is probably not very far removed from the author's own. In the years just preceding Lachmann Halm published several orations of Cicero with elaborate critical Latin notes; and yet, though his spelling was somewhat better than that of Jahn's Persius, it is still essentially 'conventional' and arbitrary: in the years following Lachmann he published a series of school editions of Cicero's orations with brief German notes, and now in these the spelling was wholly modelled on the system pursued by Lachmann. The same system too he has carried out in those volumes of the elaborate edition of Cicero edited by him and Baiter, which came out after Lachmann's Lucretius. Stimulated by the examples of Madvig Ritschl and Lachmann the rising generation of German scholars has pursued the critical study of Latin with eminent success; and nearly all of them follow in orthography the guidance of Lachmann. This system then may fairly I think be now regarded as the true 'conventional' system; for surely the Lachmanns and Ritschls of the nineteenth century have a better right to dictate to us in the present day what shall be accepted as 'conventional' than the Poggios and Vallas of the fifteenth. Since my first edition came out, Madvig has published the last books of his text of Livy, of which there exists but a single and very ancient ms.: these he has edited in a form differing from that of the other books, and has now given his very weighty authority in favour of adhering to the spelling of the oldest mss., with some reservations which I do not understand. And now too in his new edition of the de finibus he has entirely abandoned the orthography of the other.

In following Lachmann then I am sure that I have authority on my side; I believe that I have reason as well. In those cases indeed to which I have already referred, where the universal testimony of inscriptions and of mss. beyond a certain age proves that there is only one right way and about which the best scholars are all now agreed, there cannot be any doubt what course should be taken: we must write *querella loquella luella sollers sollemnis sollicito Iuppiter littera quattuor stuppa lammina*; on the other hand *milia conecto conexus coniti conixus coniveo conubium belua baca sucus litus* and the like; *condicio solacium, setius artus* (adj.) *autumnus suboles*: in many of them an important principle is involved: obeying the almost unanimous testimony of our own and other good mss. we cannot but give *umerus umor* and the like: also *hiemps*. I have heard it asked what then is the genitive of *hiemps*: to which the best reply perhaps would be what is the perfect of *sumo* or supine of *emo*. The Latins wrote *hiemps*, as they wrote *emptum sumpsi sumptum* and a hundred such forms, because they disliked *m* and *s* or *t* to come together without the intervention of a *p* sound; and our mss. all attest this: *tempto* likewise is the only true form, which the Italians in the 15th century rejected for *tento*. Then mss. and inscriptions prove that *d* took an *n* before it, *tandem quendam eundem* and the like, with the exception of *circumdo* in which the mss. both of Lucr. and Virgil always retain the *m*: and generally, though not invariably, *m* on the other hand remained before *q*: *quemquam tamquam* and so on; though the new corpus inscrip. Lat. has I find *nunquam*; and so has Augustus in his res gestae, but *quotiescumque*. Then always *quicque quicquam quicquid* (indef.), but generally *quidquid* (relative), though *quicquid* is found in the lex Rubria and once in our AB: always *peremo interemo neglego intellego* etc. Above all we must scout such barbarisms as *coelum moestus sylva caetera nequicquam*. In these points Wagner is as good a guide as Lachmann; but in regard to the cases in which ancient usage varied shall we follow the former who deserts the mss. for preconceived general rules, or Lachmann who here also is content to obey the best evidence he can get? I have unhesitatingly come over to the views of the latter: 'hypotheses non fingo' should be the rule in this as in other matters. As said above, all these uncertain spellings fall under a very few general heads. One of these is the assimilation or non-assimilation of prepositions: *inpero* represents the etymology, *impero* the pronunciation of the word. From the most ancient period of which we have any record, centuries before Cicero or Lucretius, a compromise was made between these opposing interests: words in common use soon began to change the consonant, those in less common use retained it longer. In the first volume of the corpus inscrip. Lat., the most recent of which are as old as the age of Lucretius, most of them much older, *imperator* occurs 26 times, and is always spelt with *m*, proving that in a

word, which must daily have been in everybody's mouth, etymology in remote times yielded as was natural to sound: *imperium* again occurs three, *inperium* six times, being doubtless in somewhat less common use. Now in Lucretius *imperium impero* or *imperito* occurs six times, and the mss. always spell with *m*, and so Lucretius spelt I have no doubt: indeed many of these common words the silver age I believe more frequently wrote with *n*, than did that of Cicero. Then Virgil uses *imperium* 40 times; and Ribbeck's capital mss. have *m* in every instance, except M which twice has *inp.*, though one of these two cases is at least doubtful: for Aen. VIII 381 Fogginius prints *imperiis*. Yet in defiance of all this evidence Wagner gives us *inperium*, surely without reason on any view of the case; for the foundation on which we must build is thus withdrawn from under our feet. To take another common instance, *commuto* occurs 9 times in the corpus inscrip. and always with *m*; 12 times in Lucretius and always with *m*. Other words are more uncertain: we find in the mss. *impius* and *inpius*, *immortalis* and *inmortalis*, *conligere* and *colligere*, *compleo* and *conpleo*; and so with other prepositions, *ab*, *ob*, *sub*, *ad*: all tending to prove that usage was in most words uncertain. Again we have *exsto*, and *exto*, *exsolvo*, *exulto expiro expecto* cet., *s* being generally omitted; and this agrees with Quintilian I 7 4 who implies that it was a learned affectation of some to write *exspecto* in order to distinguish *ex* and *specto* from *ex* and *pecto*; it agrees too with all other good evidence: the mss. of Virgil furnish precisely the same testimony as those of Lucretius; yet Wagner in all such cases writes *exs*: surely we should keep *ex* where the mss. keep it, *exs* where they have *exs*: and so with *supter* or *subter*, *suptilis* or *subtilis*, *ab-* or *ap-*, *ob-* or *op-*, *sub-* or *sup-*, *succ-* or *susc-*, and the like: *appareo* occurs ten times in Lucr. and is always spelt thus by our mss.: so *apparo*, *appello* (both 1 and 3 conj.); but *adpetitur* and always *adpono*, *adporto* or *atporto*, in which words the separate force of the preposition continued to be felt: in exact conformity with this the first volume of the corp. inscr. has twenty times *appareo* and also *apparitor*, proving that in the earliest times the prepos. had been assimilated in this common technical word: thus too in the 21 instances of *appareo* in Virgil all Ribbeck's mss. always have *app.* except M once, Aen. XI 605, misled by the usage of its age: comp. the suggestive remark of Servius to Aen. I 616 '*applicat*: secundum praesentem usum per *d* prima syllaba scribitur: secundum antiquam orthographiam ...per *p*': yet in defiance of all this Wagner makes Virgil always write *adpareo* and the like. We find *haud* and *haut*, and sometimes *aliut aliquit quicquit* and the like, sound and etymology carrying on an undecided battle in the mss. of Lucretius, as in inscriptions and elsewhere: *adque* is sometimes but rarely found, sound having here as might be expected gained the victory: Wagner cannot be right in always forcing *adque* on Virgil. Lucretius seems to have recognised only *sed*: he once has *elabsa*,

and once *praescribta*: see notes 2 to VI 92: in such forms sound must have at an early period prevailed; and *b d g* gave way to *p t c* before *s* and *t*: *lapsus* for *labsus* is the same principle as *rex* (*recs*), *rexi* (*recsi*) written sometimes *recxi*, *rectum* from *rego*: to judge from the best mss. *labsus* and the like became again much more common in the silver age. Mommsen has recently published an admirable copy and exposition of the res gestae of Augustus from the Ancyra monument. Augustus was somewhat of a purist in spelling and cashiered an officer for using in a dispatch the vulgarism *isse* (not *ixe*) instead of *ipse*. His system quite bears out what has just been said: he always writes *imperium* and *imperator*; he has *immortalis*, but *inmissus*; *impensa*, while the heading of the work, not written by him, but perhaps by Tiberius, has *inpensa*: generally *conlega* and *conlegium*, but once *collegium* and *collaticius*; *exilium*, but *exstinguere*; on the other hand *sexsiens* as well as *sexiens*, proving that *x* and *xs* were identical: he writes *appellaverunt*; but *adque* the only time he uses the word.

Another question involving a multitude of details is the use of *-is* or *-es* in the accus. plur. of participles and adjectives and substantives whose gen. plur. ends in *ium*, as well as of some other classes, *doloris* or *dolores*, *maioris* or *maiores*: here too Wagner involves himself in inextricable perplexities by his eclectic system, when his mss. were admirable guides, had he chosen to follow them. The mss. of Lucretius are no less admirable and probably represent very fairly the author's own usage: they offer *-is* five times out of six; and *-es* is somewhat more common in substantives in very general use, as *ignes vires aures*. Inscriptions quite bear out our mss.; and the sole relic of Latin yet disinterred from Herculaneum contains this v. *Utraque sollemnis iterum revocaverat orbes.* Pertz recently printed in the Berlin transactions the few remaining leaves of a ms. of Virgil, which he assigns to the age of Augustus and which may really be of the second or third century: we there find the acc. plur. of adjectives and participles ending 18 times in *-is*, 3 times in *-es pares felices amantes*; of substantives we find *sonoris*, but 4 times *vires*, and *artes messes crates classes aves*, quite confirming the testimony of our A and B. Varro de ling. Lat. VIII 66 writes *item quod in patrico casu hoc genus dispariliter dicatur* civitatum parentum *et* civitatium parentium: *in accusandi hos* montes fontes *et hos* montis fontis; and in Lucr. II 587 we find *potestates*, V 1239 *potestatis*: then ib. 67 he says *quid potest similius esse quam* gens mens dens? *quom horum casus patricus et accusativus in multitudine sint disparilis; nam a primo fit* gentium *et* gentis, *utrobique ut sit* i; *ab secundo* mentium *et* mentes, *ut in priore solo sit* i; *ab tertio* dentum *et* dentes, *ut in neutro sit* i; well our mss. six times have the acc. *gentis*, never *gentes*; *dentes* four times, never *dentis*; *mentes* five times, once only, II 620, *mentis*. As for the nomin. plur. of such words, Varro l. l. 66 says *sine reprehensione vulgo alii*

dicunt in singulari hac ovi *et* avi, *alii hac* ove *et* ave, *in multitudinis hae* puppis restis *et hae* puppes restes: the fragment of Virgil just cited has the nomin. plur. *putris* and *messis*, though we saw it had *messes* in the accus.: in accordance then with these high authorities the mss. of Lucr. not unfrequently retain this nomin. in *-is*, which it would be monstrous to extirpate: I have always therefore kept it. In precise conformity with Lucr. Augustus has in the accus. *agentis* and *labentes*, *finis* and *fines*, *consules* and once *consulis*: once too the nomin. *pluris*. On the other hand he always uses the accus. *gentes*, departing in this word from the rule of Varro and Lucr. We see from the corpus inscr. that *-eis -is -es* were all in use: it is probable that Lucr. occasionally employed the termination *-eis*, intermediate in sound between *-es* and *-is*; but, if so, his manuscripts have left few or no traces, and it would be most perverse to follow Avancius Wakefield and others in thrusting it into his verses in season and out of season: v 1280 B has *mortaleis*, perhaps from Lucr.: Augustus more than once has this *-eis* in the abl. plur., *quadrigeis*, *emeriteis*; and the inscription in his honour still existing on the arch of Rimini erected in 727, midway therefore in time between his res gestae and Lucr., has *celeberrimeis*, *vieis*, *redditeis*. A and B have however not a few indications expressed or implied of the ending *-ei*: see note 2 to III 97 *oculei*: these have of course been carefully preserved.

On another question, comprehending a multitude of particular instances, I have followed Lachmann and our mss. which here too are on the whole excellent guides: I speak of the vowel or consonant *u* followed by another *u*. The old Latins appear to have been unable to pronounce *uu*; and therefore the ancient *o* long kept its place after *u*; or for *qu c* or *q* was used: *quom qum* or *cum*, never *quum*; *linquont linqunt* or *lincunt*; *sequontur*, *sequntur* or *secuntur*; *equos* (nom.) *equs* or *ecus*; *volgus divos divom aevom* and so on. They appear to have begun soonest to tolerate *uu* in terminations, when both were vowels, *suus tuus* and the like. Now the mss. of Lucretius have retained in very many instances *divom volnus volgo vivont* cet.; *equos* (nom.) and *ecus*, *ecum*, *aecum*; *relinquont relinqunt* or *relincunt* oftener than *relinquunt*, so *sequontur secuntur secutus locuntur locutus*; but with Lachmann I retain the *uu*, when the mss. offer it, in order not to get lost on a sea of conjectural uncertainty like Wagner and some others, who not only desert mss. but in many cases intrude a spelling older than the age of their author: thus Augustus has *rivus rivum annuum* (not once *-uo* or *-vo*); why not then Virgil, or at least Varius and Tucca? The mss. of Lucretius are also very pertinacious in retaining the genuine old forms *reicit eicit* or *eiĕcit* cet. and never offering *reiicit eiicit* and the like: *Grai Grais*, not *Graii Graiis*. But further details on the most interesting points of the ancient orthography will be found in various parts of my notes. Again in those many cases where the sound was intermediate between *u* and *i* and the

spelling therefore uncertain, such as the penult of superlatives and certain other adjectives, and words like *lubet* or *libet*, *dissipat* or *dissupat*, *quadrupes* or *quadripes* and many others, I have of course submitted to the guidance of our mss. which only once for instance have *u* in the superl. and once *manufesta*, and twice offer *arbita*, not *arbuta*. Augustus, having learnt it probably in boyhood from the all-accomplished dictator, for whose apprehension nothing was either too little or too great and who, Gellius tells us, first introduced the *i* for *u* in superlatives, invariably writes *frequentissimus septimus vicensimus*, as well as *finitimus manibiae*: comp. what Suetonius says of his use of *sĭmus* for *sumus*, probably from a wish to be consistent. He would scarcely have thanked Varius and Tucca for bringing him the Aeneid embellished with Wagner's *maxumus*, *septumus* and the like, introduced so often in spite of his mss. [Both forms are found in the same sentence lex colon. Genetivae c. 66 (Ephem. Epigraph. vol. III p. 93) *optima lege optumo iure.*] I have likewise followed AB in the adoption of *e* or *o* in *vertere* or *vortere* and the like: *e* is naturally the more common, yet *vorti vorsum divorsi vortitur convortere vortex* are all found: also in reading *reddunda gignundis dicundum cernundi faciundum agundis* cet. or the more usual *agendum quaerendum* cet. Do I then claim in all these doubtful cases to reproduce the spelling of Lucretius or his first editor? Certainly not; but still in most of them Lucretius and his contemporaries undoubtedly allowed themselves much latitude; and I have not intentionally permitted anything to remain which might not have been found in one or other ms. before the death of Virgil. By adhering tenaciously to the mss. where not demonstrably wrong one gains a firm resting place from which to make further advances, if better evidence offer itself. However that may be, I cannot bring myself to accept the arbitrary and eclectic system of a Wagner, much less the hideous barbarisms of a Wakefield; nor on the other hand, after feasting on the generous cereals of a Lachmann and a Ritschl, can I stomach the 'conventional' husks and acorns of the Italians of the 15th century. At the same time it will be seen that my spelling differs less from this system, than does that of Wagner in his standard text of 1841, or even his subsequent modification of that text for common use which Prof. Conington has adopted in his Virgil.

Most of the abbreviations and marks used in the notes are sufficiently explained above: A and B denote the two Leyden mss., Gott. the Gottorpian fragment, Nicc. the Florentine ms. written by Nicolò Niccoli, Flor. 29, 31, 32 the mss. of the Laurentian library forming nos. 29, 31, 32 of desk XXXV; Camb. our Cambridge ms.; Vat. or Vatic. the Vatican mss.; and Urbin. Othob. or Reg. with the number attached identify more nearly the mss. contained in those several departments of the library: one Vat. 2 Vat. 3 Vat. mean one, two or three of the Vatican mss. where it was not worth while specifying them. In this

new edition Mon. denotes the codex of Victorius in the Munich library. Brix. Ver. Ven. Ald. 1 Junt. Ald. 2 are the editions fully described above, where it is explained when and why the names Avancius, Candidus, Marullus, Naugerius are or are not used instead of that of one or other of these editions. The ms. notes of Heinsius and Vossius, which are often cited, indicate the notes by those scholars which are in my private possession and have been described above. Lamb. Wak. Lach. Bern. Bentl. need no explanation after what has been said; and in this edition Pont. and Mar. designate Pontanus and Marullus, whose readings I have got from the sources mentioned. The dots ... imply that one verse, * that more than one or an uncertain number are lost; such interpolations as it has been deemed advisable to retain in the text, are printed in small capitals; the letters syllables and words which are omitted in the mss. but can be restored with more or less certainty, are given in Italics. In quoting Ennius the last edition, that of Vahlen, has been used; for the fragments of the Roman scenic writers, except Ennius, that of Ribbeck: in citing Cicero the smaller sections are referred to as far the most convenient for reference: for Terence the several recent editions; for Plautus Ritschl and Fleckeisen in the plays they have published; in the others the old variorum ed. has been employed: in Pliny the sections of recent editions are cited, as the older divisions are intolerably awkward. Notes 1 have been made as short as is consistent with perspicuity: unless the contrary is expressly stated or implied, the word or words which appear first in the note are those of our text; thus '*genitabilis. genitalis* etc.' signifies that *genitabilis* is the right reading and is found in A and B and the other chief authorities, but *genitalis* is mentioned for the reasons given. Again '281 *quam* Lach. for *quem. quod* Junt.' means that Lachmann first gave the correct reading *quam* instead of *quem* which is the reading of A and B and other mss. as well as editions before the Juntine of 1512 which prints *quod*, the reading generally followed by the old editors. Of course if any one before Lachmann had read *quam*, he, not Lachmann, would have been cited for it. 'Ed.' means the present editor. Let it always be remembered that the corrupt reading, cited in a note, is that which appears in A and B, unless the contrary is expressly stated.

The passages which were first added to the second edition have been enclosed within [ ] in cases where ambiguity or awkwardness might be occasioned, if no distinction were made between the old and the new matter; but not otherwise.

T. LUCRETI CARI

DE RERUM NATURA

LIBER PRIMUS

Aeneadum genetrix, hominum divomque voluptas,
alma Venus, caeli subter labentia signa
quae mare navigerum, quae terras frugiferentis
concelebras, per te quoniam genus omne animantum
concipitur visitque exortum lumina solis:
te, dea, te fugiunt venti, te nubila caeli
adventumque tuum, tibi suavis daedala tellus
summittit flores, tibi rident aequora ponti
placatumque nitet diffuso lumine caelum.
nam simul ac species patefactast verna diei
et reserata viget genitabilis aura favoni,
aeriae primum volucres te, diva, tuumque
significant initum perculsae corda tua vi.
15 inde ferae pecudes persultant pabula laeta
14 et rapidos tranant amnis: ita capta lepore

11 *genitabilis. genitalis* has no authority, but it does not appear to be 'typographi Veronensis peccatum', as I found it in Vat. 1136 Othobon. 14 15: Niccoli followed by all the Flor. mss. Camb. etc. has these verses in the right order. 14 Wak. proposes *fere* which is indeed rather the ms. reading.

After 15 the v. *Illecebrisque tuis omnis natura animantum* is inserted in the Juntine and in most subsequent editions, not however by Naugerius in Aldine 2, as Lachmann incorrectly states. It has been generally assigned to Marullus, but as I found it in the margin of Flor. xxxv 29, for reasons given above p. 8 I attribute it to Angelo Politian. Victorius however inserts it among what profess to be solely Pontanus' conjectures; though he has not written it in the same style, nor apparently at the same time, as the rest: it is possible then that Pontanus or he may have got it from Politian's ms. Marullus in marg. Mon. for *capta* proposes

te sequitur cupide quo quamque inducere pergis.
denique per maria ac montis fluviosque rapacis
frondiferasque domos avium camposque virentis
omnibus incutiens blandum per pectora amorem
efficis ut cupide generatim saecla propagent.
quae quoniam rerum naturam sola gubernas
nec sine te quicquam dias in luminis oras
exoritur neque fit laetum neque amabile quicquam,
te sociam studeo scribendis versibus esse
quos ego de rerum natura pangere conor
Memmiadae nostro, quem tu, dea, tempore in omni
omnibus ornatum voluisti excellere rebus.
quo magis aeternum da dictis, diva, leporem.
effice ut interea fera moenera militiai
per maria ac terras omnis sopita quiescant.
nam tu sola potes tranquilla pace iuvare
mortalis, quoniam belli fera moenera Mavors
armipotens regit, in gremium qui saepe tuum se
reicit aeterno devictus vulnere amoris,
atque ita suspiciens tereti cervice reposta
pascit amore avidos inhians in te, dea, visus,
eque tuo pendet resupini spiritus ore.
hunc tu, diva, tuo recubantem corpore sancto
circumfusa super, suavis ex ore loquellas
funde petens placidam Romanis, incluta, pacem.
nam neque nos agere hoc patriai tempore iniquo

quodque: this Victorius in his copy of Marullus' corrections first wrote down, and afterwards erased, because I presume the line of the Juntine rendered it unnecessary: a strong indication that he got this v. from Junt. a copy of which now in the Munich library he has filled with elaborate notes of his own: his spelling too of *amneis* in his second copy of Ven. shews he took it from Junt.; as Pontanus and Marullus recognise only *-es* or *-is*. Again Lambinus who evidently had access to ms. notes of Pontanus as stated above, says distinctly in a passage already quoted in p. 8 'neque eum Naugerius neque Pontanus habuerunt': what he there says of Marullus is mere report. Nicc. and the Italians having changed in 16 *quamque* into *cunque* had rendered the sentence unintelligible without some addition. 16 *pergis* Nicc. A corr. etc. for *tergis*.

27 *ornatum* A corr. Priscian etc. for *oralatum*. 32 *fera moenera* Lamb. for *feram onera*. *moenia* scholiast of Statius. 33 *regit* Nicc. scholiast of Statius for *regium*. 34 *Reicit* B Gottorp. *Reficit* A Nicc. Camb. Pontanus etc. *devictus*. *devinctus* Pont. Lamb. and scholiast of Statius. 35 Nicc. rightly

possumus aequo animo nec Memmi clara propago
talibus in rebus communi desse saluti.

*

quod superest, vacuas auris animumque sagacem
semotum a curis adhibe veram ad rationem,
ne mea dona tibi studio disposta fideli,
intellecta prius quam sint, contempta relinquas.
nam tibi de summa caeli ratione deumque
disserere incipiam et rerum primordia pandam,
unde omnis natura creet res auctet alatque,
quove eadem rursum natura perempta resolvat,
quae nos materiem et genitalia corpora rebus
reddunda in ratione vocare et semina rerum
appellare suëmus et haec eadem usurpare
corpora prima, quod ex illis sunt omnia primis.
  Humana ante oculos foede cum vita iaceret
in terris oppressa gravi sub religione
quae caput a caeli regionibus ostendebat
horribili super aspectu mortalibus instans,
primum Graius homo mortalis tollere contra
est oculos ausus primusque obsistere contra,

gives *tereti* for *teriti*. 43 *desse* A corr. Nicc. for *id esse*. 44—49 = II 646—651. Is. Vossius in his ms. notes in my possession well observes that some one has inserted them here 'ut ostenderet Lucret. sibi adversari qui, cum Deos mortalia non curare affirmat [sic], Venerem tamen invocet'. Pont. Mar. Junt. omit them. Avancius in the text of Ald. 1 places them after 61 and has been followed by most editors before Lach.; but in his preface he well observes 'unum affirmare ausim *Omnis enim* cum quinque sequentibus ex prologo, cum abundent, demendos esse: hos aptius legas, cum de magna matre agit'. 50 *Quod superest, vacuas auris animumque sagacem*: so Bernays in Rhein. Mus. n. f. v p. 559 from the interpr. Verg. in Maii class. auct. t. VII p. 262. *Quod superest ut vacuas auris* AB. Nicc. followed by all the Flor. Camb. Mon. and most mss. and all the old editions omitted *ut* and added *mihi*, *Memmius*, *et te*. Lamb. *Memmiada*. At the end of Junt. is proposed *vacuas mihi quaeso Memmius aures Semotus curis*: Pont. gives *Quod superest quaeso vacuas mihi Memmius auris*. Lach. has rightly seen that our reading implies the loss of one or more verses in which the poet passed from Venus to Memmius: he suggests *animumque, age, Memmi*, which would complete the sentence in a way: so would *corque, inclute Memmi*, or the like. 66 *tollere*. *tendere* Lamb. ed. 3 Lach. from Nonius 'teste nostris antiquiore'. But where our mss. give, as here, a faultless reading, it seems uncritical to prefer that of such a careless writer as Nonius: older and better authorities than he is continually misquote: Seneca in 57 has *quoque* for *quove*, Gellius in 304 *aut* for *et*, 306 Nonius *candenti* for *dispansae in*, II 13 Lactantius *stultas* for *miseras*, 1001 *ful-*

quem neque fama deum nec fulmina nec minitanti
murmure compressit caelum, sed eo magis acrem
inritat animi virtutem, effringere ut arta
naturae primus portarum claustra cupiret.
ergo vivida vis animi pervicit, et extra
processit longe flammantia moenia mundi
atque omne immensum peragravit mente animoque,
unde refert nobis victor quid possit oriri,
quid nequeat, finita potestas denique cuique
quanam sit ratione atque alte terminus haerens.
quare religio pedibus subiecta vicissim
opteritur, nos exaequat victoria caelo.
Illud in his rebus vereor, ne forte rearis
inpia te rationis inire elementa viamque
indugredi sceleris. quod contra saepius illa
religio peperit scelerosa atque impia facta.
Aulide quo pacto Triviai virginis aram
Iphianassai turparunt sanguine foede
ductores Danaum delecti, prima virorum.
cui simul infula virgineos circumdata comptus
ex utraque pari malarum parte profusast,
et maestum simul ante aras adstare parentem
sensit et hunc propter ferrum celare ministros
aspectuque suo lacrimas effundere civis,
muta metu terram genibus summissa petebat.
nec miserae prodesse in tali tempore quibat
quod patrio princeps donarat nomine regem;
nam sublata virum manibus tremibundaque ad aras
deductast, non ut sollemni more sacrorum
perfecto posset claro comitari Hymenaeo,
sed casta inceste nubendi tempore in ipso
hostia concideret mactatu maesta parentis,

gentia for *rellatum*. 68 *fama*. *fana* Bentl. and Lach. who says '*fama* non omnis necessario *magna* est': *fana* may be right: see v 75; but *fama deum* seems to me more emphatic and the *deum* to be equivalent to an epithet.
70 *effringere* Priscian and also I find Flor. 29 Vat. 1136 Othob. Mon. p. m. for *confringere*, rightly no doubt. *virtutem animi confringere* Nicc. 71 *cupiret* Prisc. A corr. for *cuperet*. 74 *omne* A corr. Flor. 28 and 32 for *omnem*.
77 *quanam* A corr. for *quantum*. 83 *atque*. *ac* B and Gott. 84 *Triviai* Prisc. for *Triviat*. 85 *Iphianassai* A corr. Avanc. for *Iphianassa*. *Iphianasseo*

exitus ut classi felix faustusque daretur.
tantum religio potuit suadere malorum.
Tutemet a nobis iam quovis tempore vatum
terriloquis victus dictis desciscere quaeres.
quippe etenim quam multa tibi iam fingere possunt
somnia quae vitae rationes vertere possint
fortunasque tuas omnis turbare timore!
et merito; nam si certam finem esse viderent
aerumnarum homines, aliqua ratione valerent
religionibus atque minis obsistere vatum.
nunc ratio nulla est restandi, nulla facultas,
aeternas quoniam poenas in morte timendumst.
ignoratur enim quae sit natura animai,
nata sit an contra nascentibus insinuetur,
et simul intereat nobiscum morte dirempta
an tenebras Orci visat vastasque lacunas
an pecudes alias divinitus insinuet se,
Ennius ut noster cecinit qui primus amoeno
detulit ex Helicone perenni fronde coronam,
per gentis Italas hominum quae clara clueret;
etsi praeterea tamen esse Acherusia templa
Ennius aeternis exponit versibus edens,
quo neque permaneant animae neque corpora nostra,
sed quaedam simulacra modis pallentia miris;
unde sibi exortam semper florentis Homeri
commemorat speciem lacrimas effundere salsas
coepisse et rerum naturam expandere dictis.
quapropter bene cum superis de rebus habenda
nobis est ratio, solis lunaeque meatus
qua fiant ratione, et qua vi quaeque gerantur
in terris, tum cum primis ratione sagaci
unde anima atque animi constet natura videndum;
et quae res nobis, vigilantibus obvia, mentes

Nicc. all Flor. Camb. all Vat. etc. 104 *possunt* Mar. Junt. for *possum*. As A and the Italians have *iam*, B and Gott. *me*, I once thought the right reading might be *a me fingere possum*: see Cambridge Journal of philology I p. 42 and Lucr. III 271. 111 *timendumst* Orelli eclog. in notes, Lach. for *timendum*. 121 *edens*. *eïdem* Lach. without cause. 122 *permaneant*. *permanent* Aug. Politian in marg. of Flor. 29, Ver. Ven. Ald. 1 Junt. etc. followed by all before Lach. *perveniant* Mar. 126 *Coepisse et* B corr. Flor. 31 for

terrificet morbo adfectis, somnoque sepultis,
cernere uti videamur eos audireque coram,
morte obita quorum tellus amplectitur ossa.
nec me animi fallit Graiorum obscura reperta
difficile inlustrare Latinis versibus esse,
multa novis verbis praesertim cum sit agendum
propter egestatem linguae et rerum novitatem;
sed tua me virtus tamen et sperata voluptas
suavis amicitiae quemvis sufferre laborem
suadet et inducit noctes vigilare serenas
quaerentem dictis quibus et quo carmine demum
clara tuae possim praepandere lumina menti,
res quibus occultas penitus convisere possis.

Hunc igitur terrorem animi tenebrasque necessest
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.
principium cuius hinc nobis exordia sumet,
nullam rem e nilo gigni divinitus umquam.
quippe ita formido mortalis continet omnis,
quod multa in terris fieri caeloque tuentur
quorum operum causas nulla ratione videre
possunt ac fieri divino numine rentur.
156 quas ob res ubi viderimus nil posse creari
de nilo, tum quod sequimur iam rectius inde
perspiciemus, et unde queat res quaeque creari
155 et quo quaeque modo fiant opera sine divom.

159 Nam si de nilo fierent, ex omnibu' rebus
omne genus nasci posset, nil semine egeret.
e mare primum homines, e terra posset oriri
squamigerum genus et volucres erumpere caelo;
armenta atque aliae pecudes, genus omne ferarum,
incerto partu culta ac deserta tenerent.

Coepisset. 130 *tum* Flor. 25 and 31 Camb. p. m. Mar. for *tunc.* 141 *quemvis sufferre* Flor. 32 in margin, Heinsius in ms. notes, and Faber for *quemvis efferre.* [So perhaps Cic. epist. VIII 1 2 we should read *sermones suppressit* : *expressit* M.] Dion. Cat. distich. III 6 has *quemvis sufferre laborem*, perhaps taken from this. 155—158 Mar. Junt. and margin of Camb. have these vs. in right order, and *et* for *ut* in 157. Avancius *et*, and at end of his edition of Catull. 1502 has right order. *et* Pont. also.

161—164 are rightly thus punctuated by Lach. I find however from his proof sheets that until the final revision he had with Wak. put a stop after

nec fructus idem arboribus constare solerent,
sed mutarentur, ferre omnes omnia possent.
quippe, ubi non essent genitalia corpora cuique,
qui posset mater rebus consistere certa?
at nunc seminibus quia certis quaeque creantur,
inde enascitur atque oras in luminis exit,
materies ubi inest cuiusque et corpora prima;
atque hac re nequeunt ex omnibus omnia gigni,
quod certis in rebus inest secreta facultas.
praeterea cur vere rosam, frumenta calore,
vites autumno fundi suadente videmus,
si non, certa suo quia tempore semina rerum
cum confluxerunt, patefit quodcumque creatur,
dum tempestates adsunt et vivida tellus
tuto res teneras effert in luminis oras?
quod si de nilo fierent, subito exorerentur
incerto spatio atque alienis partibus anni,
quippe ubi nulla forent primordia quae genitali
concilio possent arceri tempore iniquo.
nec porro augendis rebus spatio foret usus
seminis ad coitum, si e nilo crescere possent;
nam fierent iuvenes subito ex infantibu' parvis
e terraque exorta repente arbusta salirent.
quorum nil fieri manifestum est, omnia quando
paulatim crescunt, ut par est, . . .
. . . . semine certo
crescentesque genus servant; ut noscere possis
quicque sua de materia grandescere alique.
huc accedit uti sine certis imbribus anni
laetificos nequeat fetus submittere tellus
nec porro secreta cibo natura animantum
propagare genus possit vitamque tueri;

volucres and *armenta*, and none after *caelo.* Lamb. puts a colon after *pecudes* and alters *tenerent* to *teneret.* 168 *certa* A corr. Nicc. for *derta.* 176 *quia* Flor. 31 Camb. superscr. for *qui.* 175 *Vites. Uvas* Pont. 177 *creatur* A corr. Nicc. for *orcatu.* 185 *si e nilo. e nihilo si* Junt. Lamb. etc. not Mar.: so 291 *cum flumen. flumen cum* Lamb.; II 36 *si in plebeia. si plebeia in* Mon. Junt. and Lamb.: in all cases against mss. and the usage of Lucretius.

189 the homoeoteleuton has probably caused a v. of this kind to drop out: *tempore certo, Res quoniam crescunt omnes de s. c.* Lach. awkwardly *ut par est semine certo*

ut potius multis communia corpora rebus
multa putes esse, ut verbis elementa videmus,
quam sine principiis ullam rem existere posse.
denique cur homines tantos natura parare
non potuit, pedibus qui pontum per vada possent
transire et magnos manibus divellere montis
multaque vivendo vitalia vincere saecla,
si non, materies quia rebus reddita certast
gignundis e qua constat quid possit oriri?
nil igitur fieri de nilo posse fatendumst,
semine quando opus est rebus quo quaeque creatae
aeris in teneras possint proferrier auras.
postremo quoniam incultis praestare videmus
culta loca et manibus melioris reddere fetus,
esse videlicet in terris primordia rerum
quae nos fecundas vertentes vomere glebas
terraique solum subigentes cimus ad ortus.
quod si nulla forent, nostro sine quaeque labore
sponte sua multo fieri meliora videres.

Huc accedit uti quicque in sua corpora rursum
dissoluat natura neque ad nilum interemat res.
nam siquid mortale *e* cunctis partibus esset,
ex oculis res quaeque repente erepta periret.
nulla vi foret usus enim quae partibus eius
discidium parere et nexus exsolvere posset.
quod nunc, aeterno quia constant semine quaeque,
donec vis obiit quae res diverberet ictu
aut intus penetret per inania dissoluatque,
nullius exitium patitur natura videri.
praeterea quaecumque vetustate amovet aetas,
si penitus peremit consumens materiem omnem,
unde animale genus generatim in lumina vitae
redducit Venus, aut redductum daedala tellus
unde alit atque auget generatim pabula praebens?
unde mare ingenuei fontes externaque longe

Crescere, resque genus. Crescendo Mar. Junt. Lamb. etc. 207 *possint* Pont. Ald. 1 Junt. for *possent*: a change which will often have to be made: mss. are more apt to put *possent* for *possint* than vice versa. 215 *quicque* Lamb. for *quicquid.* 217 *e* added by. Nicc. 230 I follow the mss.: *mare,*

flumina suppeditant? unde aether sidera pascit?
omnia enim debet, mortali corpore quae sunt,
infinita aetas consumpse anteacta diesque.
quod si in eo spatio atque anteacta aetate fuere
e quibus haec rerum consistit summa refecta,
inmortali sunt natura praedita certe,
haut igitur possunt ad nilum quaeque reverti.
denique res omnis eadem vis causaque volgo
conficeret, nisi materies aeterna teneret,
inter se nexu minus aut magis indupedita;
tactus enim leti satis esset causa profecto,
quippe, ubi nulla forent aeterno corpore, quorum
contextum vis deberet dissolvere quaeque.
at nunc, inter se quia nexus principiorum
dissimiles constant aeternaque materies est,
incolumi remanent res corpore, dum satis acris
vis obeat pro textura cuiusque reperta.
haud igitur redit ad nilum res ulla, sed omnes
discidio redeunt in corpora materiai.
postremo pereunt imbres, ubi eos pater aether
in gremium matris terrai praecipitavit;
at nitidae surgunt fruges ramique virescunt
arboribus, crescunt ipsae fetuque gravantur;
hinc alitur porro nostrum genus atque ferarum,
hinc laetas urbes pueris florere videmus
frondiferasque novis avibus canere undique silvas;
hinc fessae pecudes pingui per pabula laeta
corpora deponunt et candens lacteus umor
uberibus manat distentis; hinc nova proles
artubus infirmis teneras lasciva per herbas
ludit lacte mero mentes perculsa novellas.
haud igitur penitus pereunt quaecumque videntur,
quando alid ex alio reficit natura nec ullam
rem gigni patitur nisi morte adiuta aliena.

ingenuei Lach. and Ed. in ed. 1. *externaque. extentaque* Lach. *longe. large* Bern. and Ed. in ed. 1. 240 *nexu* Mon. Junt. for *nexus.* Lamb. ed. 1 and 2 *nexas* (*nexus* ed. 1 is a misprint) and *indupedite*; ed. 3 *nexus...endopedita.* 257 *pingui* Iun. Philargyrius to Virg. geor. III 124 for *pinguis*, as Heyne there notices. 263 *alio* Nicc. for *allo.* 264 *adiuta* A corr. Nicc. for *adluta.*

Nunc age, res quoniam docui non posse creari
de nilo neque item genitas ad nil revocari,
nequa forte tamen coeptes diffidere dictis,
quod nequeunt oculis rerum primordia cerni,
accipe praeterea quae corpora tute necessest
confiteare esse in rebus nec posse videri.
principio venti vis verberat incita portus
ingentisque ruit navis et nubila differt,
interdum rapido percurrens turbine campos
arboribus magnis sternit montisque supremos
silvifragis vexat flabris: ita perfurit acri
cum fremitu saevitque minaci murmure ventus.
sunt igitur venti nimirum corpora caeca
quae mare, quae terras, quae denique nubila caeli
verrunt ac subito vexantia turbine raptant,
nec ratione fluunt alia stragemque propagant
et cum mollis aquae fertur natura repente
flumine abundanti, quam largis imbribus auget
montibus ex altis magnus decursus aquai
fragmina coniciens silvarum arbustaque tota,
nec validi possunt pontes venientis aquai
vim subitam tolerare: ita magno turbidus imbri
molibus incurrit validis cum viribus amnis:
dat sonitu magno stragem volvitque sub undis
grandia saxa: ruit qua quicquid fluctibus obstat.
sic igitur debent venti quoque flamina ferri,
quae veluti validum cum flumen procubuere
quamlibet in partem, trudunt res ante ruuntque
impetibus crebris, interdum vertice torto
corripiunt rapideque rotanti turbine portant.
quare etiam atque etiam sunt venti corpora caeca,

271 *portus* all Vat. Flor. 29 and 31 Flor. 30 corr. Camb. for *cortus*. *pontum* Mar. Politian in marg. of Flor. 29, Junt. and apparently Nicc.. *cautes* Lach. which is very weak. 274 '*saevit, Marul.*' says Gifanius: and so Mar. corrects in Mon.; but Junt. has rightly *sternit*. 276 *ventus* Lach. for *pontus*. .. 282 *quam* Lach. for *quem*. *quod* Flor. 30 corr. Pont. Mar. Junt. 286 *turbidus* A corr. Nicc. for *turbibus*. 289 *quicquid* Ed. for *quidquid*: no further change is required: see notes 2: *ruitque ita quidquid* Lach. *ruitque aqua q.* Ed. formerly.

294 *rapide* Lach. for *rapidi* which Wak. absurdly retains. *rapidoque rotantia* Lamb. ed. 1 and 2, *rapidoque rotanti* ed. 3.

quandoquidem factis et moribus aemula magnis
amnibus inveniuntur, aperto corpore qui sunt.
tum porro varios rerum sentimus odores
nec tamen ad naris venientis cernimus umquam,
nec calidos aestus tuimur nec frigora quimus
usurpare oculis nec voces cernere suemus;
quae tamen omnia corporea constare necessest
natura, quoniam sensus inpellere possunt.
tangere enim et tangi, nisi corpus, nulla potest res.
denique fluctifrago suspensae in litore vestes
uvescunt, eaedem dispansae in sole serescunt.
at neque quo pacto persederit umor aquai
visumst nec rursum quo pacto fugerit aestu.
in parvas igitur partis dispergitur umor
quas oculi nulla possunt ratione videre.
quin etiam multis solis redeuntibus annis
anulus in digito subter tenuatur habendo,
stilicidi casus lapidem cavat, uncus aratri
ferreus occulte decrescit vomer in arvis,
strataque iam volgi pedibus detrita viarum
saxea conspicimus; tum portas propter aena
signa manus dextras ostendunt adtenuari
saepe salutantum tactu praeterque meantum.
haec igitur minui, cum sint detrita, videmus.
sed quae corpora decedant in tempore quoque,
invida praeclusit speciem natura videndi.
postremo quaecumque dies naturaque rebus
paulatim tribuit, moderatim crescere cogens,
nulla potest oculorum acies contenta tueri;
nec porro quaecumque aevo macieque senescunt,
nec, mare quae inpendent, vesco sale saxa peresa
quid quoque amittant in tempore cernere possis.
corporibus caecis igitur natura gerit res.

Nec tamen undique corporea stipata tenentur
omnia natura; namque est in rebus inane.

304 *et. aut* Gellius v 15: but all mss. and Seneca Tertull. Nonius have *et*.

313: Isidor. Orig. xx 14 1 'Vomer...de quo Lucretius *Uncus aratri Ferreus cculto decrescit vomer in arvis* Sumitque per detrimenta fulgorem' (not 'nitorem'). It is odd if the last words are Isidore's own: is a line of this kind lost, *Sumitque ipse suum per detrimenta nitorem?* 321 *speciem. spatium* Lach.: but see

quod tibi cognosse in multis erit utile rebus
nec sinet errantem dubitare et quaerere semper
de summa rerum et nostris diffidere dictis.
QUAPROPTER LOCUS EST INTACTUS INANE VACANSQUE
quod si non esset, nulla ratione moveri
res possent; namque officium quod corporis exstat,
officere atque obstare, id in omni tempore adesset
omnibus; haud igitur quicquam procedere posset,
principium quoniam cedendi nulla daret res.
at nunc per maria ac terras sublimaque caeli
multa modis multis varia ratione moveri
cernimus ante oculos, quae, si non esset inane,
non tam sollicito motu privata carerent
quam genita omnino nulla ratione fuissent,
undique materies quoniam stipata quiesset.
praeterea quamvis solidae res esse putentur,
hinc tamen esse licet raro cum corpore cernas.
in saxis ac speluncis permanat aquarum
liquidus umor et uberibus flent omnia guttis.
dissipat in corpus sese cibus omne animantum.
crescunt arbusta et fetus in tempore fundunt,
quod cibus in totas usque ab radicibus imis
per truncos ac per ramos diffunditur omnis.
inter saepta meant voces et clausa domorum
transvolitant, rigidum permanat frigus ad ossa,
quod nisi inania sint, qua possint corpora quaeque

notes 2: 'lege *videndo*' Bentl. 334 Bentl. says 'dele vers.'; and Lach. shews that sense and grammar prove him to be right. Spengel in the Muenchn. Gel. Anz. and others do not mend the matter by placing it after 345.

347 *licet* Nicc. for *liceret*. 349 *flent* Nicc. *fient* AB: 386 *fiat. flat* AB: 372 *alunt* AB: 449 *civent* AB: 580 *civeant* AB: this confusion of *l* and *i* is perpetual. In the small Roman capital, of the Medicean of Virgil for instance, in which some ancestor of our mss. must have been written, these letters are often undistinguishable. 356 *possint* Ed. for *possent*: by changing the punctuation of 357 I have made the sentence quite plain. Madvig emend. Livianae p. 302 n. '*possem possim, posset possit* perpetuo errore permutantur', and p. 550 '*possent*. scribendum *possint*. non aberratur fere, ut saepe dixi, nisi ubi una littera formae distant; *esset* pro *sit* scriptum non reperias'. See 207; and below 593 597 and 645, in all which places I have written *possint* for *possent*. Whether with Pont. Junt. Lamb. Lach. etc. you punctuate *Quod n. i. sint, q. possent c. q. Transire h. u. f. r. v.*, or with Gif. Creech Wak. etc. *Quod, n. i. s. q. p. c. q. Transire, h. u. f. r. v.*, in either case you get hardly grammar or sense: in 357 B and

transire, haud ulla fieri ratione videres.
denique cur alias aliis praestare videmus
pondere res rebus nilo maiore figura?
nam si tantundemst in lanae glomere quantum
corporis in plumbo est, tantundem pendere par est,
corporis officiumst quoniam premere omnia deorsum,
contra autem natura manet sine pondere inanis.
ergo quod magnumst aeque leviusque videtur,
nimirum plus esse sibi declarat inanis;
at contra gravius plus in se corporis esse
dedicat et multo vacui minus intus habere.
est igitur nimirum id quod ratione sagaci
quaerimus, admixtum rebus, quod inane vocamus.
  Illud in his rebus ne te deducere vero
possit, quod quidam fingunt, praecurrere cogor.
cedere squamigeris latices nitentibus aiunt
et liquidas aperire vias, quia post loca pisces
linquant, quo possint cedentes confluere undae;
sic alias quoque res inter se posse moveri
et mutare locum, quamvis sint omnia plena.
scilicet id falsa totum ratione receptumst.
nam quo squamigeri poterunt procedere tandem,
ni spatium dederint latices? concedere porro
quo poterunt undae, cum pisces ire nequibunt?
aut igitur motu privandumst corpora quaeque
aut esse admixtum dicundumst rebus inane
unde initum primum capiat res quaeque movendi.
postremo duo de concursu corpora lata
si cita dissiliant, nempe aer omne necessest,
inter corpora quod fiat, possidat inane.
is porro quamvis circum celerantibus auris
confluat, haud poterit tamen uno tempore totum
compleri spatium; nam primum quemque necessest
occupet ille locum, deinde omnia possideantur.

Gott. for *fieri* have *valerent* which appears to come from ULLA twice written and FIEREI: yet Bernays in 356 reads *qua corpora quaeque valerent* for *qua possent c. q.* 366 *At* Flor. 30 corr. (cod. Nicc.) and Flor. 31 for *aut*. 367 *vacui minus* Pont. Junt. Lamb. etc. for *vacuim minus* B. and Gott. *vacuum* Wak. Lach. etc. retain with A, the Ital. and Camb. mss. 384 *concursu* Gott. p. m. Flor. 30 corr. 31, Pont. Mar. Junt. for *concurso*. 389 *quemque*. *quenque* Pont.

quod si forte aliquis, cum corpora dissiluere,
tum putat id fieri quia se condenseat aer,
errat; nam vacuum tum fit quod non fuit ante
et repletur item vacuum quod constitit ante,
nec tali ratione potest denserier aer,
nec, si iam posset, sine inani posset, opinor,
ipse in se trahere et partis conducere in unum.

Quapropter, quamvis causando multa moreris,
esse in rebus inane tamen fateare necessest.
multaque praeterea tibi possum commemorando
argumenta fidem dictis conradere nostris.
verum animo satis haec vestigia parva sagaci
sunt per quae possis cognoscere cetera tute.
namque canes ut montivagae persaepe ferai
naribus inveniunt intectas fronde quietes,
cum semel institerunt vestigia certa viai,
sic alid ex alio per te tute ipse videre
talibus in rebus poteris caecasque latebras
insinuare omnis et verum protrahere inde.
quod si pigraris paulumve recesseris ab re,
hoc tibi de plano possum promittere, Memmi:
usque adeo largos haustus e fontibu' magnis
lingua meo suavis diti de pectore fundet,
ut verear ne tarda prius per membra senectus
serpat et in nobis vitai claustra resolvat,
quam tibi de quavis una re versibus omnis
argumentorum sit copia missa per auris.

Sed nunc ut repetam coeptum pertexere dictis,
omnis ut est igitur per se natura duabus
constitit in rebus; nam corpora sunt et inane,
haec in quo sita sunt et qua diversa moventur.
corpus enim per se communis dedicat esse
sensus; cui nisi prima fides fundata valebit,
haut erit occultis de rebus quo referentes

Mar. Ald. 1 Junt. for *quisque*. 391 Creech supposes some vss. to be lost after this v. 395 *denserier* A corr. Flor. 31 for *condenserier*. 404 *ferai* Nicc. Flor. 31 Camb. etc. for *ferare. ferarum* A corr. 411 *de plano* Flor. 31 Mar. Junt. for *deptano*. 412 *magnis* A corr. Nicc. all the Ital. Camb. etc. for *magnes* of A p. m. *amnes* B and Gott. and also same A corr.; whence Bentl. and Bern. read *largis haustos e. f. amnis*, making 3 changes. *magneis* Heins. in ms.

confirmare animi quicquam ratione queamus.
tum porro locus ac spatium, quod inane vocamus,
si nullum foret, haut usquam sita corpora possent
esse neque omnino quoquam diversa meare;
id quod iam supera tibi paulo ostendimus ante.
praeterea nil est quod possis dicere ab omni
corpore seiunctum secretumque esse ab inani,
quod quasi tertia sit numero natura reperta.
nam quodcumque erit, esse aliquid debebit id ipsum;
cui si tactus erit quamvis levis exiguusque,
augmine vel grandi vel parvo denique, dum sit,
corporis augebit numerum summamque sequetur.
sin intactile erit, nulla de parte quod ullam
rem prohibere queat per se transire meantem,
scilicet hoc id erit, vacuum quod inane vocamus.
praeterea per se quodcumque erit, aut faciet quid
aut aliis fungi debebit agentibus ipsum
aut erit, ut possunt in eo res esse gerique.
at facere et fungi sine corpore nulla potest res
nec praebere locum porro nisi inane vacansque.
ergo praeter inane et corpora tertia per se
nulla potest rerum in numero natura relinqui,
nec quae sub sensus cadat ullo tempore nostros
nec ratione animi quam quisquam possit apisci.

Nam quaecumque cluent, aut his coniuncta duabus
rebus ea invenies aut horum eventa videbis.
coniunctum est id quod nusquam sine permitiali
discidio potis est seiungi seque gregari,
pondus uti saxist, calor ignis, liquor aquai,
TACTUS CORPORIBUS CUNCTIS INTACTUS INANI

notes. 428 *quoquam. quaquam* Ven. Ald. 1 Lamb. etc.: but see notes 2. 435 434 rightly transposed by Lach.: centuries before him Flor. 32 in margin had this note, 'videtur proponere tantum de corpore, dicendo *Augmine vel* etc.; non enim conveniunt illa nisi corpori. cum tamen de inani quoque intellexisse appareat, ex illo *Sin intactile erit* etc. advertendum diligentius'. Then at bottom 'si legatur *Nam quodcumque...Cui si tactus...Augmine vel...Corporis*...patebit sermo'. 442 *possunt. possint* Flor. 31 Camb. etc. I now retain the ms. reading: see notes 2 to this v. and II 901 *ita ut debent*. 451 *nusquam. nunquam* Ver. Ven. and eds. before Lach. wrongly: comp. Aen. v 852 *clavumque...Nusquam amittebat*, and Conington there. *permitiali* AB rightly: see notes 2. *perniciali* vulg. and Lach. 453 *saxist* Lach. *saxi est* Wak. for *saxis*. 454 Lach. has proved to be spurious, as a nomin. *intactus*

servitium contra paupertas divitiaeque,
libertas bellum concordia, cetera quorum
adventu manet incolumis natura abituque,
haec soliti sumus, ut par est, eventa vocare.
tempus item per se non est, sed rebus ab ipsis
consequitur sensus, transactum quid sit in aevo,
tum quae res instet, quid porro deinde sequatur.
nec per se quemquam tempus sentire fatendumst
semotum ab rerum motu placidaque quiete.
denique Tyndaridem raptam belloque subactas
Troiiugenas gentis cum dicunt esse, videndumst
ne forte haec per se cogant nos esse fateri,
quando ea saecla hominum, quorum haec eventa fuerunt,
inrevocabilis abstulerit iam praeterita aetas;
namque aliut Teucris, aliut regionibus ipsis
eventum dici poterit quodcumque erit actum.
denique materies si rerum nulla fuisset
nec locus ac spatium, res in quo quaeque geruntur,
numquam Tyndaridis formae conflatus amore
ignis, Alexandri Phrygio sub pectore gliscens,
clara accendisset saevi certamina belli,
nec clam durateus Troiianis Pergama partu
inflammasset equos nocturno Graiiugenarum;
perspicere ut possis res gestas funditus omnis
non ita uti corpus per se constare neque esse,
nec ratione cluere eadem qua constet inane,
sed magis ut merito possis eventa vocare
corporis atque loci, res in quo quaeque gerantur.
  Corpora sunt porro partim primordia rerum,

cannot exist, and the datives are not consistent with the genitives of 453: Lamb. reads *saxis, calor, ignibu', liquor aquai*: but Lucr. never uses a dat. in *ai*. 455 *divitiae* A corr. Nicc. for *diviae*. 458 *eventa* the same for *evento*. 465 *Troiiugenas*, 476 *Troiianis*, 477 *Graiiugenarum* Lach. with A (477 *Graliug.* A): see Quintil. I 4 11 'sciat etiam Ciceroni placuisse, *aiio Maiiam*que geminata *i* scribere'; and Priscian inst. VII 19, who rightly says that in the oldest writings you find *eiius Pompeiius Vulteiius Gaiius* and the like: often so in extant inscriptions: see too Ribbeck prol. Verg. p. 138, Studemund Rhein. mus. XXI p. 588, and Corssen I p. 18. 467 *fuerunt* Gott. rightly for *fuerit* of AB. *fuere* Nicc. Flor. 31 Camb. etc. 469 *Teucris* Ed. for *terris*. *per sest* Lach. *saeclis* Bern. *rebus* Lamb. *terris* and *legionibus* Wak. 480 *cluere* B corr. Flor. 30 corr. Camb. for *luere*.

partim concilio quae constant principiorum.
sed quae sunt rerum primordia, nulla potest vis
stinguere; nam solido vincunt ea corpore demum.
etsi difficile esse videtur credere quicquam
in rebus solido reperiri corpore posse.
transit enim fulmen caeli per saepta domorum,
clamor ut ac voces; ferrum candescit in igni
dissiliuntque fero ferventia saxa vapore;
tum labefactatus rigor auri solvitur aestu;
tum glacies aeris flamma devicta liquescit;
permanat calor argentum penetraleque frigus,
quando utrumque manu retinentes pocula rite
sensimus infuso lympharum rore superne.
usque adeo in rebus solidi nil esse videtur.
sed quia vera tamen ratio naturaque rerum
cogit, ades, paucis dum versibus expediamus
esse ea quae solido atque aeterno corpore constent,
semina quae rerum primordiaque esse docemus,
unde omnis rerum nunc constet summa creata.
  Principio quoniam duplex natura duarum
dissimilis rerum longe constare repertast,
corporis atque loci, res in quo quaeque geruntur,
esse utramque sibi per se puramque necessest.
nam quacumque vacat spatium, quod inane vocamus,
corpus ea non est; qua porro cumque tenet se
corpus, ea vacuum nequaquam constat inane.
sunt igitur solida ac sine inani corpora prima.
praeterea quoniam genitis in rebus inanest,
materiem circum solidam constare necessest,
nec res ulla potest vera ratione probari
corpore inane suo celare atque intus habere,
si non, quod cohibet, solidum constare relinquas.
id porro nil esse potest nisi materiai

constet A Nicc. *constat* B Gott. 484 *quae* B corr. Camb. corr. for *qua*. 486 *Stinguere* AB. *Stringere* A corr. Nicc. and all later mss. and eds. before Lach.: but Flor. 30 has *Stinguere* in marg. 489 *fulmen* A corr. B corr. Nicc. corr. for *flumen*. Lach. strangely reads *caelum, p. s. domorum Cl. it*, as if the air, like a stone wall, were a good instance of a very solid thing: all mss. have *caeli* and *ut*. *ac* Avanc. first for *ad*. 491 *ferventia* Mar. Junt. and Lamb. ed. 1 for *ferventi*. 492 *tum* Brix. Ver. Ven. for *cum*. 500 *constent* B corr. for *con-*

concilium, quod inane queat rerum cohibere.
materies igitur, solido quae corpore constat,
esse aeterna potest, cum cetera dissoluantur.
tum porro si nil esset quod inane vocaret,
omne foret solidum; nisi contra corpora certa
essent quae loca complerent quaecumque tenerent,
omne quod est, spatium vacuum constaret inane.
alternis igitur nimirum corpus inani
distinctumst, quoniam nec plenum naviter extat
nec porro vacuum. sunt ergo corpora certa
quae spatium pleno possint distinguere inane.
haec neque dissolui plagis extrinsecus icta
possunt nec porro penitus penetrata retexi
nec ratione queunt alia temptata labare;
id quod iam supra tibi paulo ostendimus ante.
nam neque conlidi sine inani posse videtur
quicquam nec frangi nec findi in bina secando
nec capere umorem neque item manabile frigus
nec penetralem ignem, quibus omnia conficiuntur.
et quo quaeque magis cohibet res intus inane,
tam magis his rebus penitus temptata labascit.
ergo si solida ac sine inani corpora prima
sunt ita uti docui, sint haec aeterna necessest.
praeterea nisi materies aeterna fuisset,
antehac ad nilum penitus res quaeque redissent
de niloque renata forent quaecumque videmus.
at quoniam supra docui nil posse creari
de nilo neque quod genitum est ad nil revocari,
esse inmortali primordia corpore debent,
dissolui quo quaeque supremo tempore possint,
materies ut subpeditet rebus reparandis.

stet. 504 *rerum longe.* 'leg. *longe rerum*' Bentl. 517 *inane queat rerum* seems quite right. *inane in rebu' queat* Lach. *tectum* Mar. Ald. 1 Junt. Lamb. ed. 1 and 2, *verum* Bern. for *rerum.* 520 *esset* A corr. Avanc. for *est. siquidem nil est* Nicc. *vocaret* is the old form: see notes 2. *vacaret* Lach. 525 *Distinctumst, quoniam* Lamb. most rightly for *Distinctum quoniam* which Lach. retains beginning the apodosis with *sunt ergo* in 526. Ald. 1 and Junt. seem to take *distinctum* for *distinctum est* and to understand the passage rightly. 527 *pleno* Mar. Ald. 1 and Junt. for *poena*, and *inane* for *inani.* 533 *findi* Flor. 31 Mon. Ver. Ven. for *fundi.* 542 *que renata* Lamb. for *quaeranta.*

sunt igitur solida primordia simplicitate
nec ratione queunt alia servata per aevom
ex infinito iam tempore res reparare.
  Denique si nullam finem natura parasset
frangendis rebus, iam corpora materiai
usque redacta forent aevo frangente priore,
ut nil ex illis a certo tempore posset
conceptum summum aetatis pervadere *ad auctum.*
nam quidvis citius dissolvi posse videmus
quam rursus refici; quapropter longa diei
infinita aetas anteacti temporis omnis
quod fregisset adhuc disturbans dissoluensque,
numquam relicuo reparari tempore posset.
at nunc nimirum frangendi reddita finis
certa manet, quoniam refici rem quamque *vi*demus
et finita simul generatim tempora rebus
stare, quibus possint aevi contingere florem.
huc accedit uti, solidissima materiai
corpora cum constant, possit tamen, omnia, reddi,

551—627: Junt. puts 577—583 after 627, and 551—564 after 583. At the end of his edition Candidus says 'Marulli nos hoc loco ordinem, atque item alibi in plerisque, ubi immutatum quid offenderis, secutos esse'; and so Marullus himself in the cod. Victor.: but he appears from Flor. 30 to have got the suggestion from Niccoli himself. The learned annotator of Flor. 32 says in the margin to 550 that some put 551—564 after 576, and adds 'verum Marullo parum referre videtur quomodo legatur', shewing again that there were different traditions about Marullus. Lamb. places only 577—583 after 627. All these transpositions are utterly wrong, though Candidus says of Marullus 'quem profecto, si ad amussim rem quanque examinabis, neutiquam (sic opinor) repudiaveris'. Sauppe, Christ and others likewise transpose in various ways these much-tortured vss.: the misapprehension of 599—634 is at the bottom of such causeless changes. 553 *forent* B corr. Nicc. for *fovent.* 555 *ad auctum* Ed. These words came at the end of page 23 of the archetype from which all mss. are derived, and therefore were at the outside margin and, as has happened in so many cases, were torn away by some accident. Some one then filled up the verse with *finis* which occurs three times at the end of a line in the next thirty verses. Lach. keeps *finis* and for *summum* reads *summa* which he thus awkwardly explains, '*summa,* hoc est universo vivendi actu, *aetatis pervadere fines*, per omne vitae spatium vadere'. *summum...florem* Mar. Junt. Lamb. ed. 1 and 2, Creech etc. which Lach. proves could only mean 'pass through' not 'arrive at the flower'. *summum...finem* Flor. 30 corr. Ver. Ven. Lamb. ed. 3, Wak. etc. This is doubly wrong, as *finis* in Lucretius is always feminine. 562 *quamque videmus* B corr. Nicc. for *quamque demus.* 566 *possit* Ed. for *possint*, a corruption which *constant* and *omnia* almost inevitably caused. [Sauppe I am

mollia quae fiunt, aer aqua terra vapores,
quo pacto fiant et qua vi quaeque gerantur,
admixtum quoniam semel est in rebus inane.
at contra si mollia sint primordia rerum,
unde queant validi silices ferrumque creari
non poterit ratio reddi; nam funditus omnis
principio fundamenti natura carebit.
sunt igitur solida pollentia simplicitate
quorum condenso magis omnia conciliatu
artari possunt validasque ostendere viris.
  Porro si nullast frangendis reddita finis
corporibus, tamen ex aeterno tempore quaeque
nunc etiam superare necessest corpora rebus,
quae nondum clueant ullo temptata periclo.
at quoniam fragili natura praedita constant,
discrepat aeternum tempus potuisse manere
innumerabilibus plagis vexata per aevom.
denique iam quoniam generatim reddita finis
crescendi rebus constat vitamque tenendi,
et quid quaeque queant per foedera naturai,
quid porro nequeant, sancitum quandoquidem extat,
nec commutatur quicquam, quin omnia constant
usque adeo, variae volucres ut in ordine cunctae
ostendant maculas generalis corpore inesse,
inmutabili' materiae quoque corpus habere
debent nimirum. nam si primordia rerum
commutari aliqua possint ratione revicta,
incertum quoque iam constet quid possit oriri,
quid nequeat, finita potestas denique cuique
quanam sit ratione atque alte terminus haerens,

glad to see has fallen on the same conj. independently of me, as he makes no mention even of my ed. of 1860.] Lach. puts 568 after 585, where it is wholly out of place; Bentl. ejects it; Mar. and Junt. read *fiunt* and *geruntur*; and *fiant* in 567. Lamb. Creech etc. *cumque gerantur*: all corrupting the text and making Lucretius assert the absurd truism that all things which do become soft can become soft. 578 *quaeque. quaedam* Lamb. and Lach. 585 *crescendi* Ver. Ven. for *crescendis.* 588 *commutatur* B corr. Nicc. for *comitatur. constant. constent* Lach. 591 *inmutabili'* Lach. first for *inmutabiles. inmutabile* Flor. 31 Flor. 30 corr. vulgo absurdly. 593 and 597 *possint* Ed. for *possent*; which *constet* in 594 proves to be necessary: see 356 and note there: here too *possint* easily becomes *possent*, though *constet* does not pass into *constaret* so readily.

nec totiens possint generatim saecla referre
naturam mores victum motusque parentum.
  Tum porro quoniam est extremum quodque cacumen
*
corporis illius quod nostri cernere sensus
iam nequeunt: id nimirum sine partibus extat
et minima constat natura nec fuit umquam
per se secretum neque posthac esse valebit,
alterius quoniamst ipsum pars, primaque et una
inde aliae atque aliae similes ex ordine partes
agmine condenso naturam corporis explent,
quae quoniam per se nequeunt constare, necessest
haerere unde queant nulla ratione revelli.
sunt igitur solida primordia simplicitate
quae minimis stipata cohaerent partibus arte,
non ex illarum conventu conciliata,
sed magis aeterna pollentia simplicitate,
unde neque avelli quicquam neque deminui iam
concedit natura reservans semina rebus.
praeterea nisi erit minimum, parvissima quaeque
corpora constabunt ex partibus infinitis,
quippe ubi dimidiae partis pars semper habebit
dimidiam partem nec res praefiniet ulla.
ergo rerum inter summam minimamque quid escit?
nil erit ut distet; nam quamvis funditus omnis
summa sit infinita, tamen, parvissima quae sunt,
ex infinitis constabunt partibus aeque.
quod quoniam ratio reclamat vera negatque

599—634: this passage which is difficult, but not corrupt, has been sadly mutilated by all editors from Lambinus to Lachmann and Bernays, who all in different ways force on Lucretius a succession of absurd and self-contradictory assertions. There seems after 599 to be a hiatus such as this *Corporibus, quod iam nobis minimum esse videtur, Debet item ratione pari minimum esse cacumen Corporis* cet.: besides this *illarum* for *illorum* in 611 is the sole change I have made, two or three slight and obvious errors of AB having been corrected in the later mss. or older editions: 599 for *quoniam* Lach. *quianam*, Bern. *quod iam*: 600 for *illius* Lach. and Bern. *ullius.* Lamb. *quoniam ext. quoiusque c. Cor. est aliquod*: 611 Lach. *ullorum* after Ald. 1 Junt. Lamb. etc.: 628 and 631 Lamb. followed by all subsequent editors perversely reads *ni* for *si*, *multis* for *nullis.* 608 *nulla* Flor. 31 Ver. Ven. etc. for *ulla.* *ut nequeant ulla* B corr. which may be right.
  613 *iam* Flor. 31 Ver. Ven. etc. for *tam.* 626 *constent* Ald. Junt. for *con-*

credere posse animum, victus fateare necessest
esse ea quae nullis iam praedita partibus extent
et minima constent natura. quae quoniam sunt,
illa quoque esse tibi solida atque aeterna fatendum.
denique si minimas in partis cuncta resolvi
cogere consuesset rerum natura creatrix,
iam nil ex illis eadem reparare valeret
propterea quia, quae nullis sunt partibus aucta,
non possunt ea quae debet genitalis habere
materies, varios conexus pondera plagas
concursus motus, per quae res quaeque geruntur.

Quapropter qui materiem rerum esse putarunt
ignem atque ex igni summam consistere solo,
magno opere a vera lapsi ratione videntur.
Heraclitus init quorum dux proelia primus,
clarus *ob* obscuram linguam magis inter inanis
quamde gravis inter Graios qui vera requirunt.
omnia enim stolidi magis admirantur amantque,
inversis quae sub verbis latitantia cernunt,
veraque constituunt quae belle tangere possunt
auris et lepido quae sunt fucata sonore.

Nam cur tam variae res possint esse requiro,
ex uno si sunt igni puroque creatae;
nil prodesset enim calidum denserier ignem
nec rarefieri, si partes ignis eandem
naturam quam totus habet super ignis haberent.
acrior ardor enim conductis partibus esset,
languidior porro disiectis *dis*que supatis:
amplius hoc fieri nil est quod posse rearis
talibus in causis, nedum variantia rerum
tanta queat densis rarisque ex ignibus esse.
id quoque, si faciant admixtum rebus inane,
denseri poterunt ignes rarique relinqui.
sed quia multa sibi cernunt contraria nasci

stant. 634 *quae res* Mar. Junt. for *quas res.* 639 *ob* added by Festus.
645 *cur possint esse requiro,...si sunt* Ed. for *cur possent? requiro* etc.: comp. above 356 593 and 597. 646 *uno* B corr. Turnebus Lamb. ed. 3, Lach. for *uro.* *vero* A corr. Nicc. Flor. 31 Camb. Vat. Lamb. ed. 1 and 2, Creech. 649 *haberent* Nicc. for *haberet* A, *habere* B Gott. 651 *disiectis disque* A corr. Flor. 30 corr. for *disiectisque.* 657 *nasci* Ed. for *muse* A, *mu* B Gott. This word

et fugitant in rebus inane relinquere purum,
ardua dum metuunt, amittunt vera viai,
nec rursum cernunt exempto rebus inani
omnia denseri fierique ex omnibus unum
corpus, nil ab se quod possit mittere raptim;
aestifer ignis uti lumen iacit atque vaporem,
ut videas non e stipatis partibus esse.
quod si forte alia credunt ratione potesse
ignis in coetu stingui mutareque corpus,
scilicet ex nulla facere id si parte reparcent;
occidet ad nilum nimirum funditus ardor
omnis et *e* nilo fient quaecumque creantur.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante.
proinde aliquit superare necesse est incolume ollis,
ne tibi res redeant ad nilum funditus omnes
de niloque renata vigescat copia rerum.
nunc igitur quoniam certissima corpora quaedam
sunt quae conservant naturam semper eandem,
quorum abitu aut aditu mutatoque ordine mutant
naturam res et convertunt corpora sese,
scire licet non esse haec ignea corpora rerum.
nil referret enim quaedam decedere abire,
atque alia adtribui, mutarique ordine quaedam,
si tamen ardoris naturam cuncta tenerent;

was the last in p. 27 of the archetype and therefore on the outside margin, and as in many other cases had become partly illegible. *mussant* Flor. 31 Camb. Pont. Lamb. ed. 2 and 3, etc. without sense. *multi* Mar. Junt. Lamb. ed. 1, etc. *inesse* Flor. 30 corr. Ver. Ven. Ald. 1 Candidus at end of Junt. *Memmi* Heins. in ms. notes. '*amusoe* i.e. ἄμουσοι' Is. Voss. in ms. notes. *adesse* Lach. *amussim* Bern. 'illud Lucretio Bernaysius restituens cedet hodie nisi fallor H. Munroni *nasci* emendanti' Ritschl opusc. II p. 272. 659 *vera viai* A corr. for *ver aula.*
660 *inani* Flor. 30 corr. Mar. Junt. for *inane.* 662 *raptim* Pont. Avanc. for *raptis.* 'quidam *raptim* agnoscunt. Marullus *natum*' Candidus at end of Junt. and so Flor. 30 corr. and Mar. in cod. Vict. 665 *alia* Lach. rightly for *mia.* *ulla* Mar. Ald. 1 Junt. etc. *una* Nicc. etc. 666 *coetu stingui* Pont. Turneb. Lamb. ed. 2 and 3, etc. for *coetus stingui.* *mutare* Mar. Junt. for *musare.* Ver. Ven. Mar. Ald. 1 Lamb. ed. 1 have absurdly *in coetus stringi massareque corpus*; and Flor. 31 Camb. *mussare.* 668 *funditus* B corr. for *funditur.* *ardor* A corr. Nicc. for *arbor.* 674 *vigescat* Heins. in notes and Lach. for *vivescat*: comp. 757. *virescat* Nicc. vulg. 680 *decedere* Lamb. Lach. etc. for *descendere.* *discedere* A corr. Mar. Junt. etc. 681 *alia* Mar. Lamb. most rightly for *alio*

ignis enim foret omnimodis quodcumque crearent.
verum, ut opinor, itast: sunt quaedam corpora quorum
concursus motus ordo positura figurae
efficiunt ignis, mutatoque ordine mutant
naturam neque sunt igni simulata neque ulli
praeterea rei quae corpora mittere possit
sensibus et nostros adiectu tangere tactus.

Dicere porro ignem res omnis esse neque ullam
rem veram in numero rerum constare nisi ignem,
quod facit hic idem, perdelirum esse videtur.
nam contra sensus ab sensibus ipse repugnat
et labefactat eos unde omnia credita pendent,
unde hic cognitus est ipsi quem nominat ignem;
credit enim sensus ignem cognoscere vere,
cetera non credit, quae nilo clara minus sunt.
quod mihi cum vanum tum delirum esse videtur;
quo referemus enim? quid nobis certius ipsis
sensibus esse potest, qui vera ac falsa notemus?
praeterea quare quisquam magis omnia tollat
et velit ardoris naturam linquere solam,
quam neget esse ignis, *quidvis* tamen esse relinquat?
aequa videtur enim dementia dicere utrumque.

Quapropter qui materiem rerum esse putarunt
ignem atque ex igni summam consistere posse,
et qui principium gignundis aera rebus
constituere, aut umorem quicumque putarunt
fingere res ipsum per se, terramve creare
omnia et in rerum naturas vertier omnis,
magno opere a vero longe derrasse videntur.
adde etiam qui conduplicant primordia rerum
aera iungentes igni terramque liquori,
et qui quattuor ex rebus posse omnia rentur
ex igni terra atque anima procrescere et imbri.
quorum Acragantinus cum primis Empedocles est,

which Lach. retains. Candidus at end of Junt. '*alio* pro *alii* positum. sunt qui *alia* legunt', i.e. Mar. 683 *crearent* Lamb. first for *crearet*. 690 *ignem* B corr. for *ig. nem*. 703 *quidvis* Lach. *summam* Nicc. and all before Lach. AB Gott. omit the word, which must be uncertain. 708 *putarunt* Nicc. B corr. for *putantur* B, A corr., *putant* A p. m. 710 *vertier* B corr. Nicc. for *verti*.
711 *longe derrasse* Vat. 3275, and unless I err 1136 Othob., for *longi derrasse* of

insula quem triquetris terrarum gessit in oris,
quam fluitans circum magnis anfractibus aequor
Ionium glaucis aspargit virus ab undis,
angustoque fretu rapidum mare dividit undis
Italiae terrarum oras a finibus eius.
hic est vasta Charybdis et hic Aetnaea minantur
murmura flammarum rursum se colligere iras,
faucibus eruptos iterum vis ut vomat ignis
ad caelumque ferat flammai fulgura rursum.
quae cum magna modis multis miranda videtur
gentibus humanis regio visendaque fertur,
rebus opima bonis, multa munita virum vi,
nil tamen hoc habuisse viro praeclarius in se
nec sanctum magis et mirum carumque videtur.
carmina quin etiam divini pectoris eius
vociferantur et exponunt praeclara reperta,
ut vix humana videatur stirpe creatus.

Hic tamen et supra quos diximus inferiores
partibus egregie multis multoque minores,
quamquam multa bene ac divinitus invenientes
ex adyto tamquam cordis responsa dedere
sanctius et multo certa ratione magis quam
Pythia quae tripodi a Phoebi lauroque profatur,
principiis tamen in rerum fecere ruinas
et graviter magni magno cecidere ibi casu;
primum quod motus exempto rebus inani
constituunt, et res mollis rarasque relinquont,
aera solem ignem terras animalia frugis,

B Gott. A corr. *longi errasse* A p. m. *longeque errasse* Nicc. etc. 720 *undis*. *undans* Lach. *almae* Bern., without cause. Priscian I 35 confirms *undis*. 721 *Italiae* Nicc. for *Haeliae*. *Haeoliae* A corr. *Aeoliae* Heins. in ms. notes and Is. Vossius who says in ms. notes 'mss. habent *Haeoliae* vel *Aeoliae*. Puto olim sic dictam eam partem Italiae quam inhabitavit Jocastes Aeoli filius qui ad fretum Siculum habitabat: vid: Diodorum lib. 5. [ch. 8] G. V.' Thus Preiger and Lachmann's doubt is solved. Haverc. and Wak. also adopt this reading of Gerard father of Is. Vossius. 724 *vis ut vomat* Lamb. ed. 3 for *vis ut omniat*. *ut vis evomat* ed. 1 and 2 after Mar. Ald. 1 Junt. etc. 725 Heins. in ms. notes 'leg. *sursum*', to avoid the repetition of *rursum*. 737 *adyto* Nicc. for *adito*. 739 *profatur* A corr. Nicc. for *prosatur*. 741 *casu* A corr. Nicc. for *causa*.
744 *frugis* AB Flor. 31 etc. not Nicc.: so IV 577 and 992 *vocis* AB. *fruges* Lach. and l. l. *voces*: he says '[membranas] quamvis consentientes imitari ausus non

nec tamen admiscent in eorum corpus inane;
deinde quod omnino finem non esse secandis
corporibus faciunt neque pausam stare fragori
nec prorsum in rebus minimum consistere quic*quam*;
cum videamus id extremum cuiusque cacumen
esse quod ad sensus nostros minimum esse videtur,
conicere ut possis ex hoc, quae cernere non quis
extremum quod habent, minimum consistere *in illis*.
huc accedit item, quoniam primordia rerum
mollia constituunt, quae nos nativa videmus
esse et mortali cum corpore funditus, utqui
debeat ad nilum iam rerum summa reverti
de niloque renata vigescere copia rerum;
quorum utrumque quid a vero iam distet habe*bis*.
deinde inimica modis multis sunt atque vene*no*
ipsa sibi inter se; quare aut congressa peribunt
aut ita diffugient ut tempestate coacta
fulmina diffugere atque imbris ventosque videmus.

Denique quattuor ex rebus si cuncta creantur
atque in eas rursum res omnia dissoluuntur,
qui magis illa queunt rerum primordia dici
quam contra res illorum retroque putari?
alternis gignuntur enim mutantque colorem
et totam inter se naturam tempore ab omni.
sin ita forte putas ignis terraeque coire

sum hoc loco, ubi habent *frugis*, neque in IV 577 991 1000, ubi *vocis*; quamquam apud Nonium p. 149 16 e Varrone scriptum est *pacis*, et Manilii exemplaria in III 446 habent *lucis*'. But Varro de ling. Lat. IX 76 observes '*frugi* rectus est natura *frux*, at secundum consuetudinem dicimus ut *haec avis, haec ovis*, sic *haec frugis*'. I have no doubt then that the accus. plur. *frugis* and *vocis* come from Lucr. as well as *religionis* and the like; and that an abl. *frugi* was possible. Augustus in the monum. Ancyr. III 2 has *consulis* acc. plur. 747 *faciunt* Flor. 31 Camb. for *facient*. 748 *quicquam* Mar. Ald. 1 and Junt. for *quiquire* Flor. 31 Camb. Vat. 1136 Othob. which may be right. 752 *in illis* I have added; and these must I think be the actual words of the poet: see Camb. Journ. of phil. I p. 29. *prorsum* Lach. who quite misunderstands the argument. *rebus* Nicc. and all before Lach. 755 *utqui* of mss. is quite right: see notes 2. Lach. reads 753 *utei* for *item*, and here *funditus usque*. 758 *habebis* A corr. Nicc. etc. for *habes*. *habebas* Lamb. vulg. wrongly. 759 *veneno* Wak. Lach. for *vene*. *venena* Flor. 31 Camb. vulgo: this l. ended p. 31 of the lost archetype; and therefore these four mutilated endings of verses were on the outer margin. 767 *Alternis* A corr. for *Aternis*. 769=762, repeated without meaning.

corpus et aerias auras roremque liquoris,
nil in concilio naturam ut mutet eorum,
nulla tibi ex illis poterit res esse creata,
non animans, non exanimo cum corpore, ut arbos:
quippe suam quicque in coetu variantis acervi
naturam ostendet mixtusque videbitur aer
cum terra simul atque ardor cum rore manere.
at primordia gignundis in rebus oportet
naturam clandestinam caecamque adhibere,
emineat nequid quod contra pugnet et obstet
quominus esse queat proprie quodcumque creatur.

Quin etiam repetunt a caelo atque ignibus eius
et primum faciunt ignem se vertere in auras
aeris, hinc imbrem gigni terramque creari
ex imbri retroque a terra cuncta reverti,
umorem primum, post aera, deinde calorem,
nec cessare haec inter se mutare, meare
a caelo ad terram, de terra ad sidera mundi.
quod facere haud ullo debent primordia pacto;
immutabile enim quiddam superare necessest,
ne res ad nilum redigantur funditus omnes.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante.
quapropter quoniam quae paulo diximus ante
in commutatum veniunt, constare necessest
ex aliis ea, quae nequeant convertier usquam,
ne tibi res redeant ad nilum funditus omnes.
quin potius tali natura praedita quaedam
corpora constituas, ignem si forte crearint,
posse eadem demptis paucis paucisque tributis,

772 *ut* B corr. Flor. 31 Camb. for *et*. 774 *animans* Pont. Mar. Junt. for *animas*. 775 *quicque in coetu* Mar. Junt. for *quisque in coetum*. 776 *ostendet* Flor. 31 Avanc. for *ostendit*. 777 *atq. ardor cum rore* Lamb. acutely for *et quodam cum rore*. 778 *rebus oportet. rebu' necessest* Lach. Bern. without any necessity: if Ennius Accius Seneca Catullus, Virgil in his eclogues, Propertius Ovid and others can use the word, it is not too prosaic for Lucr. 780 *Emineat* Naugerius first for *demineat*. 781 *creatur* A corr. for *creatas*. 784 785 *hinc imbrem, ex imbri, a terra* Mar. Ald. 1 and Junt. for *hinc ignem, ex igni, in terram*: the change is peremptorily required: Catullus 62 7 *imbres* mss. for *ignes*. 789 *pacto* Mon. Ald. 1 Junt. for *facto*. 806 *ut*

ordine mutato et motu, facere aeris auras,
sic alias aliis rebus mutarier omnis?
'At manifesta palam res indicat' inquis 'in auras
aeris e terra res omnis crescere alique;
et nisi tempestas indulget tempore fausto
imbribus, ut tabe nimborum arbusta vacillent,
solque sua pro parte fovet tribuitque calorem,
crescere non possint fruges arbusta animantis'.
scilicet et nisi nos cibus aridus et tener umor
adiuvet, amisso iam corpore vita quoque omnis
omnibus e nervis atque ossibus exsoluatur;
adiutamur enim dubio procul atque alimur nos
certis ab rebus, certis aliae atque aliae res.
nimirum quia multa modis communia multis
multarum rerum in rebus primordia mixta
sunt, ideo variis variae res rebus aluntur.
atque eadem magni refert primordia saepe
cum quibus et quali positura contineantur
et quos inter se dent motus accipiantque;
namque eadem caelum mare terras flumina solem
constituunt, eadem fruges arbusta animantis,
verum aliis alioque modo commixta moventur.
quin etiam passim nostris in versibus ipsis
multa elementa vides multis communia verbis,
cum tamen inter se versus ac verba necessest
confiteare et re et sonitu distare sonanti.
tantum elementa queunt permutato ordine solo;
at rerum quae sunt primordia, plura adhibere
possunt unde queant variae res quaeque creari.
Nunc et Anaxagorae scrutemur homoeomerian

Prisc. for *et* of mss.: this change of a letter, as Bern. has seen, gives *imbribus* to the preceding sentence and completely restores the fine passage, which Lach. deplorably disfigures by transposing 806 and 807 and changing *arbusta* into *ambusta*, as if rain forsooth could like 'frost perform the effect of fire'. Lamb. and Gif. ed. 1 *et...vacillant*, the vulgate. Gif. ed. 2 keeps *et...vacillent* of mss. and says 'q. v. Marull. et vulg. *focillant*, q. v. *vacillant*, male'. Now Ald. 1 has *et tabes...focillant*. Ver. Ven. read *et tale...facillent*, whence comes *focillant*. Marullus in cod. Victor. makes no change. 814 *multa modis* Lamb. for *multimodis*. 824 *verbis* Flor. 31 Camb. Vat. Pont. Mar. etc. for *bellis*: see Lach. 830 *et*. *ut* Lach.: in five other places he changes *et*, and in two

quam Grai memorant nec nostra dicere lingua
concedit nobis patrii sermonis egestas,
sed tamen ipsam rem facilest exponere verbis.
principio, rerum quom dicit homoeomerian,
ossa videlicet e pauxillis atque minutis
ossibus hic et de pauxillis atque minutis
visceribus viscus gigni sanguenque creari
sanguinis inter se multis coeuntibu' guttis
ex aurique putat micis consistere posse
aurum et de terris terram concrescere parvis,
ignibus ex ignis, umorem umoribus esse,
cetera consimili fingit ratione putatque.
nec tamen esse ulla parte idem in rebus inane
concedit neque corporibus finem esse secandis.
quare in utraque mihi pariter ratione videtur
errare atque illi, supra quos diximus ante.
adde quod inbecilla nimis primordia fingit;
si primordia sunt, simili quae praedita constant
natura atque ipsae res sunt aequeque laborant
et pereunt neque ab exitio res ulla refrenat.
nam quid in oppressu valido durabit eorum,
ut mortem effugiat, leti sub dentibus ipsis?
ignis an umor an aura? quid horum? sanguen an ossa?

gives a far-fetched interpretation, because he says Lucr. could not use *et* for *etiam*. 834 *quom* Lach. for *quam*. Lamb. reads *Principium rerum quam* and joins it with what precedes: he is followed by all before Lach. and may be right. 'quid quod ita ne dixit quidem usquam Lucretius, sed *rerum principia* I 740 1047 II 789' says Lach. Yes, because his *primordia* are plural; but I 707 he writes *Et qui principium gignundis aera rebus Constituere* of those who have one first-beginning of things. 835 *e* Pont. Mar. Ald. 1 Junt. for *de*.

839 840 *aurique...aurum*: as he immediately enumerates the three other elements, Bentl. proposes *auraeque...auram*. 'quid hic aurum? oculos credo interpretum praestrinxit...Simplic. tamen [in Arist. phys. fol. 6 b] de Anaxag. *πάντα τὰ ὁμοιομερῆ οἷον τὸ ὕδωρ ἢ πῦρ ἢ χρυσόν* etc.' This and other passages seem to defend the text: see notes 2: yet comp. 853. 841 *ignis, umorem*. *ignem, umorem ex* Lamb. and the plur. is awkward. 843 *ulla parte idem* Nicc. vulgo for *ulla idem parte*. *ulla idem ex parte* Lach. because Lucr. he says only omits the preposition when a genitive is added; but *in rebus* seems equivalent to one: comp. Juven. VI 437 *Adque alia parte in trutina suspendit Homerum*. 846 *illi supra quos* marg. Flor. 32 Ald. 1 Junt. for *illis uira quod* A, *quo* B Gott. *illis juxta quod* Camb. Vat. 1954 Othob. *viris iuxta quos* Flor. 31 *illis iuxta* Ang. Politian in marg. Flor. 29.

847 *inbecilla* Flor. 31 Camb. for *inbecilia*. 852 *effugiat* B corr. Flor. 31

nil, ut opinor, ubi ex aequo res funditus omnis
tam mortalis erit quam quae manifesta videmus
ex oculis nostris aliqua vi victa perire.
at neque reccidere ad nilum res posse neque autem
crescere de nilo testor res ante probatas.
praeterea quoniam cibus auget corpus alitque,
scire licet nobis venas et sanguen et ossa

. . . .

sive cibos omnis commixto corpore dicent
esse et habere in se nervorum corpora parva
ossaque et omnino venas partisque cruoris,
fiet uti cibus omnis, et aridus et liquor ipse,
ex alienigenis rebus constare putetur,
ossibus et nervis sanieque et sanguine mixto.
praeterea quaecumque e terra corpora crescunt
si sunt in terris, terram constare necessest
ex alienigenis, quae terris exoriuntur.
transfer item, totidem verbis utare licebit.
in lignis si flamma latet fumusque cinisque,
ex alienigenis consistant ligna necessest.
praeterea tellus quae corpora cumque alit, auget

*

ex alienigenis, quae lignis *his* oriuntur.

Pont. Mar. for *efficiat*. 853 *sanguen an ossa* marg. Flor. 32 Pont. Lamb. for *sanguis an os*. *sanguĭs* was unknown to Lucr.: IV 1050 *sanguīs unde*; VI 1203 *sanguīs expletis*: see Lach. and add Sen. Med. 776 and Val. Flacc. III 234 *sanguīs*. Flor. 31 does not as Lach. says read *sanguis an, an os*. *sanguen os aurum* Lach., an awkward and improbable correction. 860: the verse lost here Lamb. thus supplies, *Et nervos alienigenis ex partibus esse*; which must be very like what Lucr. wrote. 861 *Sive* Flor. 31 Camb. for *Sine*. *corpore* Nicc. for *core*. 862 *Esse et* Nicc. for *Esset*. 866 *sanieque*. *venisque* Avanc. Lamb. Lach. wrongly: see notes 2: Avancius formed his text by correcting Ven. and it and Ver. have *sanisque*; hence *venis*. *mixto* Lach. after Mar. Ald. 1 Junt. Lamb. which have *misto*. *mixtim* Politian in marg. Flor. 29, which may be right. 873 here there is I believe a hiatus of two or more verses, which I formerly supplied thus, *Ex alienigenis quae tellure exoriuntur. Sic itidem quae ligna emittunt corpora, aluntur Ex* cet.: comp. especially 859—866 and notes 2. In 874 I have added *his* after *lignis*. I hardly understand Lach. who reads *quae alienigenis oriuntur*: see also Luc. Mueller de re metrica p. 284, who seems to prove that a monosyll. diphthong is never elided before a short vowel. Mar. Junt. followed by Gif. Creech omit both 873 and 874, Lamb. followed by Wak. only 873; which seems absurd: he reads in 874 *lignis*

Linquitur hic quaedam latitandi copia tenvis,
id quod Anaxagoras sibi sumit, ut omnibus omnis
res putet inmixtas rebus latitare, sed illud
apparere unum cuius sint plurima mixta
et magis in promptu primaque in fronte locata.
quod tamen a vera longe ratione repulsumst.
conveniebat enim fruges quoque saepe, minaci
robore cum saxi franguntur, mittere signum
sanguinis aut aliquid, nostro quae corpore aluntur.
consimili ratione herbis quoque saepe decebat,
cum lapidi in lapidem terimus, manare cruorem;
et latices dulcis guttas similique sapore
mittere, lanigerae quali sunt ubere lactis,
scilicet et glebis terrarum saepe friatis
herbarum genera et fruges frondesque videri
dispertita in*ter* terram latitare minute,
postremo in lignis cinerem fumumque videri,
cum praefracta forent, ignisque latere minutos.
quorum nil fieri quoniam manifesta docet *res*,
scire licet non esse in rebus res ita mixtas,
verum semina multimodis inmixta latere
multarum rerum in rebus communia debent.
'At saepe in magnis fit montibus' inquis 'ut altis
arboribus vicina cacumina summa terantur
inter se, validis facere id cogentibus austris,
donec flammai fulserunt flore coorto'.
scilicet et non est lignis tamen insitus ignis,
verum semina sunt ardoris multa, terendo
quae cum confluxere, creant incendia silvis.

exoriuntur with Flor. 31 Camb. etc. 882 *cum saxi* Mar. Ald. 1 Junt. etc. for *cum in saxi*. 884 885 rightly transposed by N. P. Howard: see notes 2 for explanation of the whole passage in which much needless change has been made: 884 *in* om. Mar. Junt. etc. 'recte, ut puto, etsi cur addita sit [praep. *in*] non intellego' Lach. *terimus* Nicc. for *tenemus*. 885 *herbis*. *herbas* Mar. Ald. 1 Junt. Lach. vulgo. 886 *latices*. *laticis* Flor. 31 Camb. vulg. Lach. wrongly. 887 *quali* B, *qualis* A, *quales* A corr. Nicc. Flor. 31 Camb. *ubere*. *ubera* Lamb.: the exact reading is uncertain. 890 *inter terram* Lach. first for *in terram*: older editors have blundered strangely.

893 *res* added by Nicc. B corr. etc. 900 *flammai* Pont. Junt. for *flammae*: a simple correction, yet overlooked by many of the later editors: even Nauger. has here deserted Junt. and reads *fulserunt flammae fulgore*

quod si facta foret silvis abscondita flamma,
non possent ullum tempus celarier ignes,
conficerent volgo silvas, arbusta cremarent.
iamne vides igitur, paulo quod diximus ante,
permagni referre eadem primordia saepe
cum quibus et quali positura contineantur
et quos inter se dent motus accipiantque,
atque eadem paulo inter se mutata creare
ignes et lignum? quo pacto verba quoque ipsa
inter se paulo mutatis sunt elementis,
cum ligna atque ignes distincta voce notemus.
denique iam quaecumque in rebus cernis apertis
si fieri non posse putas, quin materiai
corpora consimili natura praedita fingas,
hac ratione tibi pereunt primordia rerum:
fiet uti risu tremulo concussa cachinnent
et lacrimis salsis umectent ora genasque.

Nunc age quod superest cognosce et clarius audi.
nec me animi fallit quam sint obscura; sed acri
percussit thyrso laudis spes magna meum cor
et simul incussit suavem mi in pectus amorem
musarum, quo nunc instinctus mente vigenti
avia Pieridum peragro loca nullius ante
trita solo. iuvat integros accedere fontis
atque haurire, iuvatque novos decerpere flores
insignemque meo capiti petere inde coronam
unde prius nulli velarint tempora musae;
primum quod magnis doceo de rebus et artis
religionum animum nodis exsolvere pergo,
deinde quod obscura de re tam lucida pango
carmina, musaeo contingens cuncta lepore.
id quoque enim non ab nulla ratione videtur;
sed veluti pueris absinthia taetra medentes
cum dare conantur, prius oras pocula circum

after Nicc. etc. 909 *contineantur* Nauger. for *contingantur*, after Pont. apparently; for Victorius in his 2nd copy of Ven. seems to imply that *continuantur* of the first was his own error. 912 *et* B corr. Wak. for *e*. 918 *Hac* Nicc. B corr. for *Haec*. 919 *uti risu tremulo* Nicc. for *utiris ut aemulo*.

932 *animum*. *animos* Lamb. Creech after Lactantius inst. I 16. Pius says 'mo-

contingunt mellis dulci flavoque liquore,
ut puerorum aetas inprovida ludificetur
labrorum tenus, interea perpotet amarum
absinthi laticem deceptaque non capiatur,
sed potius tali pacto recreata valescat,
sic ego nunc, quoniam haec ratio plerumque videtur
tristior esse quibus non est tractata, retroque
volgus abhorret ab hac, volui tibi suaviloquenti
carmine Pierio rationem exponere nostram
et quasi musaeo dulci contingere melle,
si tibi forte animum tali ratione tenere
versibus in nostris possem, dum perspicis omnem
naturam rerum qua constet compta figura.

Sed quoniam docui solidissima materiai
corpora perpetuo volitare invicta per aevom,
nunc age, summai quaedam sit finis eorum
necne sit, evolvamus; item quod inane repertumst
seu locus ac spatium, res in quo quaeque gerantur,
pervideamus utrum finitum funditus omne
constet an immensum pateat vasteque profundum.

Omne quod est igitur nulla regione viarum
finitumst; namque extremum debebat habere.
extremum porro nullius posse videtur
esse, nisi ultra sit quod finiat; ut videatur
quo non longius haec sensus natura sequatur.
nunc extra summam quoniam nil esse fatendum,
non habet extremum, caret ergo fine modoque.
nec refert quibus adsistas regionibus eius;
usque adeo, quem quisque locum possedit, in omnis
tantundem partis infinitum omne relinquit.
praeterea si iam finitum constituatur
omne quod est spatium, siquis procurrat ad oras
ultimus extremas iaciatque volatile telum,
id validis utrum contortum viribus ire

dulatius *animos* leges'. But IV 7 *animum* Lamb. *animos* Creech. 942 *pacto* Heins. in ms. notes and Lach. rightly for *facto*. 954 *Necne sit* Pont. Lamb. for *nec sit*. 957 *vasteque* Nicc. corrupted into *adusque*; his followers *adusque* into *vel adusque*; or, as Mar. marg. Flor. 32 Ald. Junt., *patefiat ad usque*. 966 *omnis* Nicc. for *omnus*. 971 *Id validis* Lamb. first for *Invalidis*. Flor. 32 and Mar.

quo fuerit missum mavis longeque volare,
an prohibere aliquid censes obstareque posse?
alterutrum fatearis enim sumasque necessest.
quorum utrumque tibi effugium praecludit et omne
cogit ut exempta concedas fine patere.
nam sive est aliquit quod probeat officiatque
quominu' quo missum est veniat finique locet se,
sive foras fertur, non est a fine profectum.
hoc pacto sequar atque, oras ubicumque locaris
extremas, quaeram quid telo denique fiat.
fiet uti nusquam possit consistere finis
effugiumque fugae prolatet copia semper.
998 postremo ante oculos res rem finire videtur;
aer dissaepit collis atque aera montes,
terra mare et contra mare terras terminat omnis;
omne quidem vero nil est quod finiat extra.
984 Praeterea spatium summai totius omne
undique si inclusum certis consisteret oris
finitumque foret, iam copia materiai
undique ponderibus solidis confluxet ad imum
nec res ulla geri sub caeli tegmine posset
nec foret omnino caelum neque lumina solis,
990 quippe ubi materies omnis cumulata iaceret
ex infinito iam tempore subsidendo.
at nunc nimirum requies data principiorum
corporibus nullast, quia nil est funditus imum
quo quasi confluere et sedes ubi ponere possint.
995 semper in adsiduo motu res quaeque geruntur
partibus *e* cunctis infernaque suppeditantur

in margin explain *invalidis* as *valde validis*. 977 *officiat* Lamb. rightly and before him Gryphius of Lyons 1534 and 1540 for *efficiat*, after the constant usage of Lucr.: so Livy IV 31 5 Madvig after Faber reads *offecit* (mss. *effecit*) *quominus*. Lach. keeps *efficiat*. [But for *efficiat* see lex col. Genetivae II 4 7 *neve quis facito, quo minus ita aqua ducatur*.] 981 *fiat* Nicc. for *fiet*. 984—987 (998—1001) I have elsewhere proved should come in this place. 989 *inclusum* Nicc. for *inclusus*. 991 *confluxet* Flor. 31 first for *confluxit*. 997 *nullast* Politian in marg. Flor. 29 Ver. Ven. Heins. in ms. notes for *nullas*.

998 *possint* Ald. 1 Junt. for *possit*. 1000 *e* supplied by Mon. and Lach. is better than *in* of Mar. and older editors. *inferna* is quite right: see Camb. Journ. of phil. I p. 33. Lach. wrongly follows Mar. Ald. 1 Junt. Lamb. etc. in reading *aeternaque* and adds 'rei convenienter, quamvis secus videatur Wakefieldo et

ex infinito cita corpora materiai.
1002 est igitur natura loci spatiumque profundi,
quod neque clara suo percurrere fulmina cursu
perpetuo possint aevi labentia tractu
nec prorsum facere ut restet minus ire meando:
usque adeo passim patet ingens copia rebus
finibus exemptis in cunctas undique partis.
Ipsa modum porro sibi rerum summa parare
ne possit, natura tenet, quae corpus inani
et quod inane autem est finiri corpore cogit,
ut sic alternis infinita omnia reddat,
aut etiam alterutrum, nisi terminet alterum, eorum
simplice natura pateat tamen inmoderatum.

*

nec mare nec tellus neque caeli lucida templa
nec mortale genus nec divum corpora sancta
exiguum possent horai sistere tempus;
nam dispulsa suo de coetu materiai
copia ferretur magnum per inane soluta,
sive adeo potius numquam concreta creasset
ullam rem, quoniam cogi disiecta nequisset.
nam certe neque consilio primordia rerum
ordine se suo quaeque sagaci mente locarunt

Forbigero, qui quotiens philosophantur delirant': an insult quite out of place here. 1008 should commence a new paragraph. 1009 *inani* Mar. Ald. 1 Junt. for *inane*. 1013 Madvig opusc. pr. p. 313 rightly supposes some verses lost here; and long before him Marullus did the same, as I find from the margin of Flor. 32: 'credit Marullus deesse hic aliqua carmina, quae continerent transitum ab infinitate inanis ad infinitatem corporum; in his enim *Nec mare nec tellus*...procul dubio agit de infinitate corporum, cum supra [953] de utroque infinito se dicturum promiserit': so that Flor. 32 gives here the more mature, at least the better judgment of Marullus; since the cod. Victor. has the same perverse corrections which Junt. has. Lach. places the mark of hiatus after 1012, giving a most involved explanation of the passage: his arrangement moreover is scarcely grammatical, as *pateat* is thus answered in the apodosis by imperfects and pluperfects. Indeed the lacuna does not appear to me so great as it did either to Madvig or Lach.: the poet has not only shewn already that the *omne quod est*, but also 988 (984)—1007, that the *omne quod est spatium* is infinite: he now, 1008 foll., shews that matter is infinite. I formerly proposed roughly to supply what is wanting thus, *Sed spatium supra docui sine fine patere. Si finita igitur summa esset materiai, Nec mare cet.* 1023 the last four words are rightly supplied by Mar. and Junt. from v 421: the mss. here repeat the last three of 1022. Avancius blunders sadly, doubtless from not understanding

nec quos quaeque *darent motus pepigere profecto,*
sed quia multa modis multis mutata per omne
ex infinito vexantur percita plagis,
omne genus motus et coetus experiundo
tandem deveniunt in talis dispositura,
qualibus haec rerum consistit summa creata,
et multos etiam magnos servata per annos
ut semel in motus coniectast convenientis,
efficit ut largis avidum mare fluminis undis
integrent amnes et solis terra vapore
fota novet fetus summissaque gens animantum
floreat et vivant labentes aetheris ignes;
quod nullo facerent pacto nisi materiai
ex infinito suboriri copia posset,
unde amissa solent reparare in tempore quaeque.
nam veluti privata cibo natura animantum
diffluit amittens corpus, sic omnia debent
dissolui simul ac defecit suppeditare
materies aliqua ratione aversa viai.
nec plagae possunt extrinsecus undique summam
conservare omnem quaecumque est conciliata.
cudere enim crebro possunt partemque morari,
dum veniant aliae ac suppleri summa queatur.
interdum resilire tamen coguntur et una
principiis rerum spatium tempusque fugai
largiri, ut possint a coetu libera ferri.
quare etiam atque etiam suboriri multa necessest,
et tamen ut plagae quoque possint suppetere ipsae,
infinita opus est vis undique materiai.
 Illud in his rebus longe fuge credere, Memmi,
in medium summae, quod dicunt, omnia niti,
atque ideo mundi naturam stare sine ullis
ictibus externis neque quoquam posse resolvi

what he is taking from others. 1028 *rerum* Faber and Bentl. from v 194 most rightly for *rebus.* 1033 *summissaque* Pont. Mar. Junt. for *summaque.* 1034 *Floreat* Flor. 31 Camb. etc. for *floreant.* 1040 *Dissolui* Nicc. B corr. for *Dissoluit.* 1041 *viai* B corr. vulgo for *via.* *viaque* Lach.: but *ratione viaque* surely means 'by method and system': see Cic. de fin. I 29 *ut ratione et via procedat oratio.* 1047 *Principiis* Mar. Junt. for *principium.* 1061 *Et simili.* Lach. reads

summa atque ima, quod in medium sint omnia nixa:
ipsum si quicquam posse in se sistere credis:
et quae pondera sunt sub terris omnia sursum
nitier in terraque retro requiescere posta,
ut per aquas quae nunc rerum simulacra videmus.
et simili ratione animalia suppa vagari
contendunt neque posse e terris in loca caeli
reccidere inferiora magis quam corpora nostra
sponte sua possint in caeli templa volare;
illi cum videant solem, nos sidera noctis
cernere, et alternis nobiscum tempora caeli
dividere et noctes parilis agitare diebus.
sed vanus stolidis haec
amplexi quod habent perv
nam medium nil esse potest
infinita. neque omnino, si iam *medium sit,*
possit ibi quicquam consistere
quam quavis alia longe ratione
omnis enim locus ac spatium quod in*ane vocamus*
per medium per non medium concedere *debet*
aeque ponderibus, motus quacumque feruntur.
nec quisquam locus est, quo corpora cum vener*unt,*
ponderis amissa vi possint stare *in* inani;

Adsimili and joins with it the preceding verse, putting a full stop at *posta.* I think him quite wrong: the simile is exactly the same as IV 418, where also Lach. makes unnecessary changes. 1068—1075: these 8 mutilated verses came at the beginning of p. 45 of the archetype; and the ends were therefore at the outer margin. B and Gott. omit them altogether, but append a cross and VIII. Nicc. gives them imperfect as in A. The later mss. Ald. 1, Junt. after Mar., Lamb. complete them in various ways. I formerly suggested in 1068 *error falsa probavit* or *error somnia finxit*: 1069 *perversa rem ratione*: 1070 *quando omnia constant,* or with Lach. *ubi summa profundist*: 1072 *eam magis ob rem*: 1073 *repelli.* 1073 Lach. reads *alio* for *alia,* and proposes *meare* at end, and *malle putari* in 1072: he declines to prophesy in 1068 and 1069. 1071 Mar. Junt. most truly *neque omnino si iam medium sit* for *denique omnino si iam.* 1074 the end is supplied by Mar. Ald. 1 and Junt. 1075 *debet* Wak., *oportet* older corr. 1076 *Aeque* Junt. for *aequis* which Wak. absurdly defends. 1078 *in* added by Mar. Ald. 1 Junt.

1082 *concilio* Mar. Junt. for *concilium,* the *m* coming from *medii.* *concilium...vectae* Lach. which seems less poetical. *vinctae* Bentl. 1085 1086 are transposed by Mar. and Junt. followed by all before Lach.: but Ussing, Tidsskr. for Philol. VI, has rightly seen that a v. is lost before 1085, which comparing VI 495 I would thus supply *Et quae de supero in terram mittuntur ut imbres.*

nec quod inane autem est ulli subsistere debet,
quin sua quod natura petit, concedere pergat.
haud igitur possunt tali ratione teneri
res in concilio medii cuppedine victae.
  Praeterea quoniam non omnia corpora fingunt
in medium niti, sed terrarum, atque liquoris
. . . .
et quasi terreno quae corpore contineantur,
umorem ponti magnasque e montibus undas,
at contra tenuis exponunt aeris auras
et calidos simul a medio differrier ignis,
atque ideo totum circum tremere aethera signis
et solis flammam per caeli caerula pasci,
quod calor a medio fugiens se ibi conligat omnis,
nec prorsum arboribus summos frondescere ramos
posse, nisi a terris paulatim cuique cibatum
. . . .
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. . . .
. . . .

1091 *se ibi* Wak. for *sibi*. 1094—1101: A has faithfully left a blank space for these eight lost verses: they came at the beginning of p. 46 of the lost archetype; the eight mutilated lines above having headed the page on the other side of the leaf; Lach. therefore most justly concludes that this part of the leaf in the original of our mss. was by some accident torn away. Both the old ms. collations of A and B which I possess mention this lacuna: Heinsius says 'in A octo versuum hiatus erat relictus': the less careful Vossius, though the manuscript was his own, merely says 'vide ms. in quo hiatus post haec verba'. Think now of Havercamp, a Professor in the University where A and B then were, never noting this fact, but inserting the miserable makeshift verse of Mar. and Junt. *Terra det: at supra circum tegere omnia caelum*; stealing the critical note of the London bookseller's edition, and stating that this spurious verse was not in B, from which every reader must infer it was in A. I formerly made the following verses to shew the general sense of those which are lost: *Diffundat truncum ac ramos natura per omnis, Scilicet incerto diversi errore vagantes Argumenta sibi prorsum pugnantia fingunt. Quae tamen omnia sunt falsa ratione recepta. Nam quoniam docui spatium sine fine modoque Inmensumque patere in cunctas undique partis, Sic parili ratione necessest suppeditetur Infinita etiam vis undique materiai, Ne* cet. Pontanus saw that the passage was a fragment.

ne volucri ritu flammarum moenia mundi
diffugiant subito magnum per inane soluta
et ne cetera consimili ratione sequantur
neve ruant caeli penetralia templa superne
terraque se pedibus raptim subducat et omnis
inter permixtas rerum caelique ruinas
corpora solventes abeat per inane profundum,
temporis ut puncto nil extet reliquiarum
desertum praeter spatium et primordia caeca.
nam quacumque prius de parti corpora desse
constitues, haec rebus erit pars ianua leti,
hac se turba foras dabit omnis materiai.
  Haec sei pernosces, parva perductus opella
. . . .
namque alid ex alio clarescet nec tibi caeca
nox iter eripiet quin ultima naturai
pervideas: ita res accendent lumina rebus.

1105 *penetralia* Nicc. for *tonetralia*; rightly followed by all the old eds. before Lamb. who reads *tonitralia*: VI 865 *sonitus* all mss. for *penitus*: neither *tonetralia* nor *tonitralia* is Latin. 1108 *abeat* Ed. after Mar. Junt. for *abeant* wrongly adapted to the adjacent plural: comp. VI 286: *omnis* agrees with *terra*: comp. VI 605 sqq.: Lach. in 1106 reads *omnia*, as also II 719 without authority.
1114 *sei* Ed. after Nicc. Flor. 31 Camb. Mon. etc. for *sic*: a verse is here lost which I feel sure was of this kind, *Cetera iam poteris per te tute ipse videre*, with which the preceding words *parva perductus opella* must be joined: Lucr. says it is hard to master his principles, but when that is thoroughly done, then led on with little trouble you may learn the rest yourself: comp. especially 400—417, and see Camb. Journ. of phil. I p. 374. Lach. for *sic* reads *scio* and *perdoctus* for *perductus*, and then gets no satisfactory sense: Mar. and Junt. read *non* for *nec* in 1115: Lamb. *perfunctus* for *perdoctus*: Bern. *sis*, and *perdoctus* after Lach.

T. LUCRETI CARI

DE RERUM NATURA

LIBER SECUNDUS

Suave, mari magno turbantibus aequora ventis,
e terra magnum alterius spectare laborem;
non quia vexari quemquamst iucunda voluptas,
sed quibus ipse malis careas quia cernere suave est.
6 suave etiam belli certamina magna tueri
5 per campos instructa tua sine parte pericli.
sed nil dulcius est, bene quam munita tenere
edita doctrina sapientum templa serena,
despicere unde queas alios passimque videre
errare atque viam palantis quaerere vitae,
certare ingenio, contendere nobilitate,
noctes atque dies niti praestante labore
ad summas emergere opes rerumque potiri.
o miseras hominum mentes, o pectora caeca!
qualibus in tenebris vitae quantisque periclis
degitur hoc aevi quodcumquest! nonne videre
nil aliud sibi naturam latrare, nisi utqui
corpore seiunctus dolor absit, mente fruatur

5 and 6 rightly transposed by Avancius. 12 *praestante plabore* AB. *praestantes prae labore* Nicc. p. m. 16 *nonne videre* AB Gott. which Gif., followed tacitly by Lamb. ed. 3, has most properly retained. *videre est* was the common reading, which Lach. shews Lucr. could not have written. '*videtis* Marull.' says Gif.: and in cod. Victor. Marullus p. m. *videtis*; s. m. *videre est*, as Junt.: *videtis* Ald. 1, and this is mentioned as a var. lec. at end of Junt.: so also Lamb. ed. 1, but *videre est* ed. 2. 17—19 mss. are quite right: see notes 2: 17 *utqui.* *ut cui* Avanc. Lach. *ut quoi* Gif. 18 *mente.* *menti'*

iucundo sensu cura semota metuque?
ergo corpoream ad naturam pauca videmus
esse opus omnino, quae demant cumque dolorem.
delicias quoque uti multas substernere possint
gratius interdum, neque natura ipsa requirit,
si non aurea sunt iuvenum simulacra per aedes
lampadas igniferas manibus retinentia dextris,
lumina nocturnis epulis ut suppeditentur,
nec domus argento fulget auroque renidet
nec citharae reboant laqueata aurataque tecta,
cum tamen inter se prostrati in gramine molli
propter aquae rivum sub ramis arboris altae
non magnis opibus iucunde corpora curant,
praesertim cum tempestas adridet et anni
tempora conspergunt viridantis floribus herbas.
nec calidae citius decedunt corpore febres,
textilibus si in picturis ostroque rubenti
iacteris, quam si in plebeia veste cubandum est.
quapropter quoniam nil nostro in corpore gazae
proficiunt neque nobilitas nec gloria regni,
quod superest, animo quoque nil prodesse putandum;
si non forte tuas legiones per loca campi
fervere cum videas belli simulacra cientis,

Lach. without cause. 19 *semota.* *semotu'* Lamb. in notes, Gif. Bentl. Lach. for *semota.* 21 22 23 see notes 2 for the explanation of this passage which I have corrected by a better punctuation. 27 *fulget auroque.* *fulgenti* Lach. But comp. v 1049 *sciret animoque*, where Lachmann's *scirent* perverts the meaning. *fulgens, renidens* Macrob. sat. VI 2 Pont. Avanc. Junt. etc. *fulgens renidet* Mar. P. Crinitus de hon. disc. XVII 6. 28 *citharae.* *citharam* Macrob. sat. VI 2, *cithara* id. VI 4. *aurataque.* *ornataque* Lach. *arquataque* Bern. *tecta* Lach. for *templa*, and Macrob. sat. VI 4, but VI 2 *tempe*, which comes perhaps from the preceding passage of Virgil: yet the *templa* of the mss. of Lucr. may have a technical meaning. [But for *tecta* and *templa* confused see O. Hirschfeld untersuch. p. 149, and p. 187 n. 4.] 36 *Iacteris.* *Iactaris* Lamb. ed. 2 and 3. 41 *Fervere* Flor. 30 corr. Flor. 31 Camb. for *Fruere* A, *Eruere* B. 40—46: this passage I think I have arranged much better than Lach. or Bern.: 42 *et ecum vi* (*etecūvi*) Ed. for *epicuri*: comp. *tariter* of mss. for *pariter* in 43: 43 *Ornatasq. armis statuas pariterque* Ed. for *Ornatas armis itastuas* (*itasiuas* B Gott.) *tariterque*: then *Fervere cum videas classem lateque vagari*, which is not found in our mss. but is quoted by Nonius p. 503 from Lucretius lib. II, is clearly in its right place after 46, not 43, where Lach. and others have put it: I have also put a stop after *paride* in 45. For *statuas* corrupted into *itastuas*

subsidiis magnis et ecum vi constabilitas,
ornatas*que* armis statuas pariterque animatas,
his tibi tum rebus timefactae religiones
effugiunt animo pavide; mortisque timores
tum vacuum pectus lincunt curaque solutum,
fervere cum videas classem lateque vagari.
quod si ridicula haec ludibriaque esse videmus,
re veraque metus hominum curaeque sequaces
nec metuunt sonitus armorum nec fera tela
audacterque inter reges rerumque potentis
versantur neque fulgorem reverentur ab auro
nec clarum vestis splendorem purpureai,
quid dubitas quin omni' sit haec rationi' potestas?
omnis cum in tenebris praesertim vita laboret.
nam veluti pueri trepidant atque omnia caecis
in tenebris metuunt, sic nos in luce timemus
interdum, nilo quae sunt metuenda magis quam
quae pueri in tenebris pavitant finguntque futura.
hunc igitur terrorem animi tenebrasque necessest
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.
  Nunc age, quo motu genitalia materiai
corpora res varias gignant genitasque resolvant

comp. Lach. to IV 283, and *istatuam* for *statuam* in Orelli inscript. 1120. Because Lucr. V 1227 has *Induperatorem classis super aequora verrit Cum validis pariter legionibus atque elephantis*, Lach. says 'apparet haec ita legenda esse, *Subsidiis magnisque elephantis constabilitas, Ornatas armis, validas, pariterque animatas'*. The *apparet* is anything but clear to me. Bern. reads *hastatis* for *epicuri*, *pariter* for *itastuas*. See Lach. on the way these two verses are written in AB: Nicc. omits them: later mss. Flor. 31 Camb. etc. treat them as a heading: the old eds. to Ald. 1 and Pius inclusive have them variously corrupted. Junt. first omits them in text with this note at end, '*Subsidiis magnis Epicuri constabilitas.* Marullus carmen hoc expungit. Nam illud, *ornatas armis statuas, stanteisque animatas*, procul dubio subditicium est': and in cod. Victor. Marullus does expunge them. All subsequent eds. before Lach. omitted them, except Gif. who mixes up a portion of them with a part of the line from Nonius in this fashion, *Fervere cum videas; classem lateque vagari, Ornatamque armis belli simulacra cientem.* Lamb. ed. 3 first gives the l. from Nonius in full. 46 *pectus* Lamb. for *tempus*: a necessary change. Aen. I 46 *tempore* Probus for *pectore.* 52 *purpureai* Nicc. for *purpura.* 53 Mar. Ald. 1 Junt. Lamb. *omne sit hoc rationis egestas*, perversely. 54 *laboret* Nicc. B corr. for *raboret.* 56 *sic*, as in III 88 VI 36. *ita* Senec. epist. 110, shewing what little

et qua vi facere id cogantur quaeque sit ollis
reddita mobilitas magnum per inane meandi,
expediam: tu te dictis praebere memento.
nam certe non inter se stipata cohaeret
materies, quoniam minui rem quamq*ue* videmus
et quasi longinquo fluere omnia cernimus aevo
ex oculisque vetustatem subducere nostris,
cum tamen incolumis videatur summa manere
propterea quia, quae decedunt corpora cuique,
unde abeunt minuunt, quo venere augmine donant,
illa senescere at haec contra florescere cogunt,
nec remorantur ibi. sic rerum summa novatur
semper, et inter se mortales mutua vivunt.
augescunt aliae gentes, aliae minuuntur,
inque brevi spatio mutantur saecla animantum
et quasi cursores vitai lampada tradunt.
  Si cessare putas rerum primordia posse
cessandoque novos rerum progignere motus,
avius a vera longe ratione vagaris.
nam quoniam per inane vagantur, cuncta necessest
aut gravitate sua ferri primordia rerum
aut ictu forte alterius. nam *cum* cita saepe
obvia conflixere, fit ut diversa repente
dissiliant; neque enim mirum, durissima quae sint
ponderibus solidis neque quicquam a tergo ibus obstet.
et quo iactari magis omnia materiai
corpora pervideas, reminiscere totius imum
nil esse in summa, neque habere ubi corpora prima
consistant, quoniam spatium sine fine modoquest
inmensumque patere in cunctas undique partis
pluribus ostendi et certa ratione probatumst.
quod quoniam constat, nimirum nulla quies est

reliance can be placed on such citations: comp. n. to I 66. 68 *quamque videmus* Nicc. B corr. for *quamquidemus.* 73 *augmine* B corr. Nicc. corr. for *agmine.* 84 *ferri* Nicc. B corr. for *terri.* 85 *nam cum (quom) cita* Wak. for *nam cita.* *cita superne* Nicc. *concita saepe* Flor. 31 Camb. 86 *conflixere* Lamb. in notes for *conflexere.* *confluxere* Nicc. etc. *cum flixere* Lamb. *ut* Avanc. for *uti.* *ita uti* Flor. 31 Camb. etc. 88 *tergo ibus* Is. Vossius in ms. notes (not Preiger) most rightly for *tergibus.* 95 *nulla* Nicc. for *multa.* *invita* Is.

reddita corporibus primis per inane profundum,
sed magis adsiduo varioque exercita motu
partim intervallis magnis confulta resultant,
pars etiam brevibus spatiis vexantur ab ictu.
et quaecumque magis condenso conciliatu
exiguis intervallis convecta resultant,
indupedita suis perplexis ipsa figuris,
haec validas saxi radices et fera ferri
corpora constituunt et cetera *de* genere horum
paucula quae porro magnum per inane vagantur.
cetera dissiliunt longe longeque recursant
in magnis intervallis: haec aera rarum
sufficiunt nobis et splendida lumina solis.
multaque praeterea magnum per inane vagantur,
conciliis rerum quae sunt reiecta nec usquam
consociare etiam motus potuere recepta.
cuius, uti memoro, rei simulacrum et imago
ante oculos semper nobis versatur et instat.
contemplator enim, cum solis lumina cumque
inserti fundunt radii per opaca domorum:
multa minuta modis multis per inane videbis
corpora misceri radiorum lumine in ipso
et velut aeterno certamine proelia pugnas
edere turmatim certantia nec dare pausam,
conciliis et discidiis exercita crebris;
conicere ut possis ex hoc, primordia rerum
quale sit in magno iactari semper inani.
dumtaxat rerum magnarum parva potest res
exemplare dare et vestigia notitiai.
hoc etiam magis haec animum te advertere par est
corpora quae in solis radiis turbare videntur,
quod tales turbae motus quoque materiai

Vossius in ms. notes. 98 *confulta* mss. and so Pont. Avanc. Pius Naugerius. *consulta* Ver. Ven. Gif. *conflicta* 2 Vat. Mar. Junt. Lamb. ed. 1 and 2, Wak. Creech. *contusa* Lamb. ed. 3. *conpulsa* Heins. in ms. notes.
99 *brevibus* Nicc. for *brevius*. 112 *memoro rei* Vat. 1706 Reg. ('olim Nicolai Heinsii') Pont. Avanc. vulg. for *memoror rei*. 118 *proelia pugnas*: so IV 1009. *proelia pugnasque* Camb. Nicc. corr. Mar. Junt. wrongly. 125 *magis haec*. 'Marull. contra v. l. scripserat, *huc*' Gif.: both Ald. 1 and Junt. have *mage ad*

significant clandestinos caecosque subesse.
multa videbis enim plagis ibi percita caecis
commutare viam retroque repulsa reverti
nunc huc nunc illuc in cunctas undique partis.
scilicet hic a principiis est omnibus error.
prima moventur enim per se primordia rerum;
inde ea quae parvo sunt corpora conciliatu
et quasi proxima sunt ad viris principiorum,
ictibus illorum caecis inpulsa cientur,
ipsaque proporro paulo maiora lacessunt.
sic a principiis ascendit motus et exit
paulatim nostros ad sensus, ut moveantur
illa quoque, in solis quae lumine cernere quimus
nec quibus id faciant plagis apparet aperte.
Nunc quae mobilitas sit reddita materiai
corporibus, paucis licet hinc cognoscere, Memmi.
primum aurora novo cum spargit lumine terras
et variae volucres nemora avia pervolitantes
aera per tenerum liquidis loca vocibus opplent,
quam subito soleat sol ortus tempore tali
convestire sua perfundens omnia luce,
omnibus in promptu manifestumque esse videmus.
at vapor is quem sol mittit lumenque serenum
non per inane meat vacuum; quo tardius ire
cogitur, aerias quasi dum diverberet undas.
nec singillatim corpuscula quaeque vaporis
sed complexa meant inter se conque globata;
quapropter simul inter se retrahuntur et extra
officiuntur, uti cogantur tardius ire.
at quae sunt solida primordia simplicitate,
cum per inane meant vacuum nec res remoratur

hoc; but over *haec* in cod. Victor. was once written a word carefully erased, as some mark under *haec* has been, quite confirming Gif.: see above p. 9. 134 *conciliatu* Nicc. for *conciliata*. 137 *Ipsaque proporro* Turneb. advers. v 27 Lach. for *Ipsaque porro*. *Ipsaque quae* Camb. vulg. *Ictaque quae* Flor. 31. 152 *quasi dum diverberet*. *quod sol diverberat* Nicc. Flor. 31 Camb. vulg. Lamb. ed. 1. *quasi tum diverberet* Lamb. ed. 2, *quasi dum diverberat* ed. 3, as Pont. before, 'pessime' says Lach.: 'nam *dum* intellegendum est *donec*'. But in my opinion, though the subj. is quite right, Lamb. well defends the indic. which is also tenable. 155 *se retrahuntur* Priscian for *se trahuntur*. 158 *remoratur*

ulla foris atque ipsa, suis e partibus una,
unum in quem coepere locum conixa feruntur,
debent nimirum praecellere mobilitate
et multo citius ferri quam lumina solis
multiplexque loci spatium transcurrere eodem
tempore quo solis pervolgant fulgura caelum.

*

[nec persectari primordia singula quaeque
ut videant qua quicque geratur cum ratione.
At quidam contra haec, ignari materiai,
naturam non posse deum sine numine credunt
tanto opere humanis rationibus admoderate
tempora mutare annorum frugesque creare,
et iam cetera, mortalis quae suadet adire
ipsaque deducit dux vitae dia voluptas
et res per Veneris blanditur saecla propagent,
ne genus occidat humanum. quorum omnia causa
constituisse deos cum fingunt, omnibu' rebus
magno opere a vera lapsi ratione videntur.
nam quamvis rerum ignorem primordia quae sint,
hoc tamen ex ipsis caeli rationibus ausim
confirmare aliisque ex rebus reddere multis,
nequaquam nobis divinitus esse creatam
naturam mundi: *tanta stat* praedita culpa.
quae tibi posterius, Memmi, faciemus aperta.

Pont. Mar. Ald. 1 Junt. for *remoravit*. 159 *ipsa, suis e partibus una, Unum* Ed. for *ipsa suis e partibus unum Unum*: the contrast with 153—156 shews this to be necessary: comp. also I 599 etc.: the repetition of *unum unum* has here no force whatever. 160 *conixa*. *conexa* mss. *connixa* Ver. Ven. followed by Nauger. and vulgo: it should be *conixa*.

165—183 Lach. has most justly marked off from the context, as interrupting the argument, though indisputably written by Lucretius: some verses too have clearly been lost before 165: as Pontanus has seen, who says 'fragmentum': Marullus supplied the unmeaning *Nam neque consilio debent tardata morari*, which became the vulgate. Bern. puts 167 before 165, and in 166 reads *persectati*, and supposes no lacuna. 166 *Ut videant* Nicc. for *Ut deant*. 168 *numine credunt* Ed. for *numine reddi*, and Pont. I now find: the *e* of *numine* has absorbed the *c*, and *redunt* in mss. much resembles *reddi*. *rentur* Mar. Junt. vulgo 'prorsus egregie' says Lach. Wak. absurdly defends *reddi*. 169 has been much tampered with in the vulg. eds. without any reason. 181 *tanta stat praedita* Lach., as in the repetition v 199, for *quamquam predita*. *quae tanta est praedita*

nunc id quod superest de motibus expediemus.]
Nunc locus est, ut opinor, in his illud quoque rebus
confirmare tibi, nullam rem posse sua vi
corpoream sursum ferri sursumque meare;
ne tibi dent in eo flammarum corpora fraudem.
sursus enim versus gignuntur et augmina sumunt
et sursum nitidae fruges arbustaque crescunt,
pondera, quantum in se est, cum deorsum cuncta ferantur.
nec cum subsiliunt ignes ad tecta domorum
et celeri flamma degustant tigna trabesque,
sponte sua facere id sine vi subigente putandum est.
quod genus e nostro quom missus corpore sanguis
emicat exultans alte spargitque cruorem.
nonne vides etiam quanta vi tigna trabesque
respuat umor aquae? nam quo magis ursimus alte
derecta et magna vi multi pressimus aegre,
tam cupide sursum revomit magis atque remittit,
plus ut parte foras emergant exiliantque.
nec tamen haec, quantum est in se, dubitamus, opinor,
quin vacuum per inane deorsum cuncta ferantur.
sic igitur debent flammae quoque posse per auras
aeris expressae sursum succedere, quamquam
pondera, quantum in sest, deorsum deducere pugnent.
nocturnasque faces caeli sublime volantis
nonne vides longos flammarum ducere tractus
in quascumque dedit partis natura meatum?
non cadere in terram stellas et sidera cernis?
sol etiam *caeli* de vertice dissipat omnis

Pont. Junt. vulgo, which may be right. Wak. adopts the interpolation of Nicc. *quamquam haec sint praedita*, and gives a ludicrous explanation of it. 187 *fraudem*. *frudem* B: see VI 187. 193 *subigente* Lamb. Creech Lach. for *subiecta*. *subeunte* Bern. which is hardly so near the ms. reading: see Madvig emend. Liv. p. 210. 194 *Quod genus e nostro*. *Quod genus est* Lach. justly blamed by Madvig Lat. gram. ed. 3 p. IX for the way in which he deals with *quod genus* here and in other places. *quom* Nicc. *com* A Lach. *cum* B. 197 *ursimus*. *urgimus* A corr. Nicc. Camb. *alte* Flor. 31 for *altu*. 198 *Derecta*. *Deiecta* Lach. 199 *revomit* Pont. Nauger. for *removet*. 203 *debent flammae quoque* Ald. 1 Junt. for *q. d. fl.* 205 *in se est deorsum deducere* Mar. Ald. 1 Junt. for *inest deorsum ducere*. *in se est* Flor. 31 Camb. *quantum est in se deorsum ducere* one Vat. Pont. Lach. 209 *cadere in terram* Nicc. for *caderem in terra*. 210 *caeli* Bern. better than *summo*

ardorem in partis et lumine conserit arva;
in terras igitur quoque solis vergitur ardor.
transversosque volare per imbris fulmina cernis:
nunc hinc nunc illinc abrupti nubibus ignes
concursant; cadit in terras vis flammea volgo.

Illud in his quoque te rebus cognoscere avemus,
corpora cum deorsum rectum per inane feruntur
ponderibus propriis, *se* incerto tempore ferme
incertisque locis spatio depellere paulum,
tantum quod momen mutatum dicere possis.
quod nisi declinare solerent, omnia deorsum,
imbris uti guttae, caderent per inane profundum,
nec foret offensus natus nec plaga creata
principiis: ita nil umquam natura creasset.

Quod si forte aliquis credit graviora potesse
corpora, quo citius rectum per inane feruntur,
incidere ex supero levioribus atque ita plag*as*
gignere quae possint genitalis reddere motus,
avius a vera longe ratione recedit.
nam per aquas quaecumque cadunt atque aera rarum,
haec pro ponderibus casus celerare necessest
propterea quia corpus aquae naturaque tenvis
aeris haut possunt aeque rem quamque morari,
sed citius cedunt gravioribus exsuperata;
at contra nulli de nulla parte neque ullo
tempore inane potest vacuum subsistere rei,
quin, sua quod natura petit, concedere pergat;
omnia quapropter debent per inane quietum
aeque ponderibus non aequis concita ferri.
haud igitur poterunt levioribus incidere umquam
ex supero graviora neque ictus gignere per se

or *aetherio* of older editors: *caeli* I had myself restored from Cic. Arat. 297 *summo caeli de vertice tranans.* 214 *abrupti.* *abruptis* Macr. sat. VI 1 27. 218 *se* added by Ed. *ferme* Flor. 31 Camb. Mar. for *firme.* 219 mss. are quite right: see notes 2: *loci spatiis decellere* Lach. whom I before followed. 220 *momen.* *minimum* two Vat. and old eds. before Junt. 226 *feruntur.* *ferantur* Vict. 227 *plagas* B corr. and Lamb. for *plag.* *plagis* Nicc. followed by all before Lamb. 229 *Avius* Nicc. for *Aulus.* 233 *Aeris haud* Nicc. for *Haeraut* A, *Haeraud* B Gott. 234 *exsuperata* Mar. Junt. for *exsuperate.* *exsuperatae* Nicc. perhaps rightly. 240 *poterunt* Flor. 31 Camb. for *potue-*

qui varient motus per quos natura gerat res.
quare etiam atque etiam paulum inclinare necessest
corpora; nec plus quam minimum, ne fingere motus
obliquos videamur et id res vera refutet.
namque hoc in promptu manifestumque esse videmus,
pondera, quantum in *s*est, non posse obliqua meare,
ex supero cum praecipitant, quod cernere possis;
sed nil omnino *recta* regione viai
declinare quis est qui possit cernere sese?

Denique si semper motus conectitur omnis
et vetere exoritur *semper* novus ordine certo
nec declinando faciunt primordia motus
principium quoddam quod fati foedera rumpat,
ex infinito ne causam causa sequatur,
libera per terras unde haec animantibus exstat
unde est haec, inquam, fatis avolsa *potestas*
per quam progredimur quo ducit quemque voluntas,
declinamus item motus nec tempore certo
nec regione loci certa, sed ubi ipsa tulit mens?
nam dubio procul his rebus sua cuique voluntas
principium dat et hinc motus per membra rigantur.
nonne vides etiam patefactis tempore puncto
carceribus non posse tamen prorumpere *e*quorum
vim cupidam tam de subito quam mens avet ipsa?
omnis enim totum per corpus materiai
copia conquiri debet, concita per artus
omnis ut studium mentis conixa sequatur;

runt. 241 *se* is found in all mss. 247 *se* before *est* added by Flor. 31 Camb. etc. 249 *recta* added by Nicc. whom all before Lach. rightly followed: it was absorbed by the similar letters in *regione.* *nulla regione* Lach. 250 *Declinare quis est qui possit cernere sese*: this reading of all mss. and editions I now keep: the constr. is not harsher than others in Lucr.: see notes 2. *de se* Ed. in small ed. for *sese.* *sensus* Bern. *praestet* Lach. for *possit.* 251 *motus* Flor. 31 Camb. for *motu.* 252 *semper* added after *exoritur* by Nicc. Flor. 31 Camb. all editors before Lach. *exacto* added by Lach. before *exoritur*: obviously not right, as the new motion does not first begin when the other ceases: the reason of the omission was the *semper* of 251. *novus atque ex ordine* Pont. 257 *potestas* Lach. for *voluptas*: a certain correction: comp. 286: Lamb. in vain transposes *voluptas* and *voluntas* of 258: Flor. 31 Camb. have *voluptas* in both places, but it can be right in neither. 264 *equorum* Brix. for *quorum,* not Nicc. Flor. 31 Camb. or Ver. Ven. 267 *conquiri* A corr. Gott. Nicc. vulg. for *conciri* of

ut videas initum motus a corde creari
ex animique voluntate id procedere primum,
inde dari porro per totum corpus et artus.
nec similest ut cum impulsi procedimus ictu
viribus alterius magnis magnoque coactu;
nam tum materiem totius corporis omnem
perspicuumst nobis invitis ire rapique,
donec eam refrenavit per membra voluntas.
iamne vides igitur, quamquam vis extera multos
pellat et invitos cogat procedere saepe
praecipitesque rapi, tamen esse in pectore *nostro*
quiddam quod contra pugnare obstareque possit?
cuius ad arbitrium quoque copia materiai
cogitur interdum flecti per membra per artus
et proiecta refrenatur retroque residit.
quare in seminibus quoque idem fateare necessest,
esse aliam praeter plagas et pondera causam
motibus, unde haec est nobis innata potestas,
de nilo quoniam fieri nil posse videmus.
pondus enim prohibet ne plagis omnia fiant
externa quasi vi; sed ne mens ipsa necessum
intestinum habeat cunctis in rebus agendis
et devicta quasi *hoc* cogatur ferre patique,
id facit exiguum clinamen principiorum
nec regione loci certa nec tempore certo.
   Nec stipata magis fuit umquam materiai
copia nec porro maioribus intervallis;
nam neque adaugescit quicquam neque deperit inde.
quapropter quo nunc in motu principiorum

A p. m. B which Lach. keeps: both must have been in the archetype. 268 *conixa* Gif. for *conexa*, as in 160. *conexa* is absurd, though in nearly all eds. before Lach. Lamb. says some mss. have *connixa*: but that I doubt. 275 *perspicuum nobisst* AB for *perspicuumst nobis*: see Lach. for the strange frequency with which *st* is thus transposed in AB. 277 *extera*. *extima* Pont. Mar. vulgo wrongly; prob. from the *extrema* of Nicc. 278 279 *Pellat...rapi* Avanc. rightly for *Pallat ... rapit*. *Pellit ... cogit ... rapit* Junt. and vulg. before Wak. *Fallat* A corr. Nicc. Flor. 31 Camb. all Vat. *Pellat...cogat* Mar. *Fallit, cogit, rapit* Pont. 281 *copia* Flor. 31 Camb. for *cona*. 283 *residit* Flor. 31 for *residia*.
291 *quasi* Nicc. for *quaei*. *hoc* add. by Ed. *id* Lach. 294 *fuit umquam* Junt. not Mar. for *fultum quam*. Cic. ad Att. XIII 40 1 for the corrupt *hic autem ut fultum*

corpora sunt, in eodem ante acta aetate fuere
et post haec semper simili ratione ferentur,
et quae consuerint gigni gignentur eadem
condicione et erunt et crescent vique valebunt,
quantum cuique datum est per foedera naturai.
nec rerum summam commutare ulla potest vis;
nam neque, quo possit genus ullum materiai
effugere ex omni, quicquam est *extra*, neque in omne
unde coorta queat nova vis inrumpere et omnem
naturam rerum mutare et vertere motus.
   Illud in his rebus non est mirabile, quare,
omnia cum rerum primordia sint in motu,
summa tamen summa videatur stare quiete,
praeterquam siquid proprio dat corpore motus.
omnis enim longe nostris ab sensibus infra
primorum natura iacet: quapropter, ubi ipsa
cernere iam nequeas, motus quoque surpere debent;
praesertim cum, quae possimus cernere, celent
saepe tamen motus spatio diducta locorum.
nam saepe in colli tondentes pabula laeta
lanigerae reptant pecudes quo quam*que* vocantes
invitant herbae gemmantes rore recenti,
et satiati agni ludunt blandeque coruscant;
omnia quae nobis longe confusa videntur
et velut in viridi candor consistere colli.
praeterea magnae legiones cum loca cursu
camporum complent belli simulacra cientes,
fulgor ibi ad caelum se tollit totaque circum
aere renidescit tellus supterque virum vi
excitur pedibus sonitus clamoreque montes

est read *hic autem, ut fuit tum, est.* 301 *vique valebunt*. *inque valebunt* Pont. Mar. Ald. 1 Junt. vulg. 'vix latine' says Lach. 305 *extra* added by Ed. after *quicquam est*, in which it was absorbed: the sentence requires this: comp. V 361 and I 963, and Camb. Journ. of phil. I p. 375. Lach. adds *seorsum* at end of verse. *neque rursus in omne* Mar. Ald. 1 Junt. vulg. 313 *ipsa* Gif. for *ipsum*. 314 *surpere* Pont. Junt. for *asurpere*. 322 *vel ut in* Lach. rightly for *veluti in* of all mss. and eds.: mss. seem to have a tendency to this blunder: 780 *uti in* for *ut in*; above v. 86 *fit uti* for *fit ut*; Virg. Aen. IV 402 *veluti ingentem* M a c, *velut* P γ b rightly; VI 708 *veluti in* FGM, *velut in* P etc. ap. Ribbeck: *uti* is never found before a vowel: see also 536 and Lach. there. 325 *ibi* Mar. Ald. 1 Junt. for *ubi*.

ieti reiectant voces ad sidera mundi
et circumvolitant equites mediosque repente
tramittunt valido quatientes impete campos.
et tamen est quidam locus altis montibus *unde*
stare videntur et in campis consistere fulgor.
  Nunc age iam deinceps cunctarum exordia rerum
qualia sint et quam longe distantia formis
percipe, multigenis quam sint variata figuris;
non quo multa parum simili sint praedita forma,
sed quia non volgo paria omnibus omnia constant.
nec mirum; nam cum sit eorum copia tanta
ut neque finis, uti docui, neque summa sit ulla,
debent nimirum non omnibus omnia prorsum
esse pari filo similique adfecta figura.
praeter eat genus humanum mutaeque natantes
squamigerum pecudes et laeta armenta feraeque
et variae volucres, laetantia quae loca aquarum
concelebrant circum ripas fontisque lacusque,
et quae pervolgant nemora avia pervolitantes;
quorum unum quidvis generatim sumere perge,
invenies tamen inter se differre figuris.
nec ratione alia proles cognoscere matrem
nec mater posset prolem; quod posse videmus
nec minus atque homines inter se nota cluere.
nam saepe ante deum vitulus delubra decora
turicremas propter mactatus concidit aras
sanguinis expirans calidum de pectore flumen;
at mater viridis saltus orbata peragrans
noscit humi pedibus vestigia pressa bisulcis,
omnia convisens oculis loca si queat usquam

330 *tramittunt* A, *transmittunt* B. 331 *unde* added by Nicc. 337 *constant* Nicc. Flor. 31 Camb. vulg. Lamb. for *constat*: 694 *constant* B Nicc. (?), Camb. vulg.: 724 *constent* AB vulg.: in all three places *constent* Lach.; but I believe the indic. to be right, and the subj. to have come from the adjacent verbs: see notes 2. 342 *Praeter eat* Ed. for *Praetere*. *Praeterea* Nonius p. 158. *Praestat rem* Ed. formerly. *Parturiunt* Lach. which I don't understand. *Praeterea* and 347 *Horum* for *Quorum* Junt. vulgo: not Mar. 343 *armenta* Bentl. and Tonson's edition for *arbusta*. 347 *quidvis* Lach. for *quodvis*, as IV 126. 356 *Noscit* Lach. for *Nonquit* A Flor. 31 Camb. etc. *Non quid* Nicc. *Oinquit* B, *Oinquid* Gott. *Linquit* B corr. Mar. Ald. 1 Junt. vulgo, without sense. *Novit* Brieger: but Lucr.

conspicere amissum fetum, completque querellis
frondiferum nemus absistens et crebra revisit
ad stabulum desiderio perfixa iuvenci,
nec tenerae salices atque herbae rore vigentes
fluminaque illa queunt summis labentia ripis
oblectare animum subitamque avertere curam,
nec vitulorum aliae species per pabula laeta
derivare queunt animum curaque levare:
usque adeo quiddam proprium notumque requirit.
praeterea teneri tremulis cum vocibus haedi
cornigeras norunt matres agnique petulci
balantum pecudes: ita, quod natura reposcit,
ad sua quisque fere decurrunt ubera lactis.
postremo quodvis frumentum non tamen omne
quique suo genere inter se simile esse videbis,
quin intercurrat quaedam distantia formis.
concharumque genus parili ratione videmus
pingere telluris gremium, qua mollibus undis
litoris incurvi bibulam pavit aequor harenam.
quare etiam atque etiam simili ratione necessest,
natura quoniam constant neque facta manu sunt
unius ad certam formam primordia rerum,
dissimili inter se quaedam volitare figura.
  Perfacile est tali ratione exsolvere nobis
quare fulmineus multo penetralior ignis
quam noster fuat e taedis terrestribus ortus;
dicere enim possis caelestem fulminis ignem
suptilem magis e parvis constare figuris

rather uses *nosco*. 359 *absistens* Ed. for *adsittens*. *adsidueis* Lach. which is very weak. *adsistens* B corr. Nicc. vulg. 361 *vigentes*. *virentes* Macrob. sat. VI 2. 362 *illa* AB Gott. *ulla* Macrob. l.l. 'B corr.' says Lach. A corr. as I and Heins. have noted, Camb. vulgo. 363 *subitam* I now keep: see notes 2. *sumptam* Ed. in 1st ed. *solitam* Lach.; but the care here is quite *insolita*. 365 *curaque*. *curamque* A corr. Nicc. 369 *Balantum* A Gott. Nicc. etc. *Balatum* B Flor. 31 Camb. etc. 371 *non tamen omne*. *non ita, Memmi* Bruno (Harburg 1872, p. 3): acutely; but see notes 2. 372 *quique* Lach. for *quidque*.
376 *pavit*. *lavit* Nonius Mar. Ald. 1 Junt. Lamb. in text, but in notes he prefers *pavit*. 381 *est tali* Lach. for *est animi*. *est parili* Bern. not so well: the *t* of *tali* was absorbed in *est*. *est iam animi* Lamb.; but *animi* is out of place.
383 *fuat* Faber and Bentl. for *fluat*: Livy XXV 12 6 mss. have *fluat* for *fuat*. 387

atque ideo transire foramina quae nequit ignis
noster hic e lignis ortus taedaque creatus.
praeterea lumen per cornum transit, at imber
respuitur. quare? nisi luminis illa minora
corpora sunt quam de quibus est liquor almus aquarum.
et quamvis subito per colum vina videmus
perfluere; at contra tardum cunctatur olivom,
aut quia nimirum maioribus est elementis
aut magis hamatis inter se perque plicatis,
atque ideo fit uti non tam diducta repente
inter se possint primordia singula quaeque
singula per cuiusque foramina permanare.
 Huc accedit uti mellis lactisque liquores
iucundo sensu linguae tractentur in ore;
at contra taetra absinthi natura ferique
centauri foedo pertorquent ora sapore;
ut facile agnoscas e levibus atque rutundis
esse ea quae sensus iucunde tangere possunt,
at contra quae amara atque aspera cumque videntur,
haec magis hamatis inter se nexa teneri
proptereaque solere vias rescindere nostris
sensibus introituque suo perrumpere corpus.
 Omnia postremo bona sensibus et mala tactu
dissimili inter se pugnant perfecta figura;
ne tu forte putes serrae stridentis acerbum
horrorem constare elementis levibus aeque
ac musaea mele, per chordas organici quae
mobilibus digitis expergefacta figurant;
neu simili penetrare putes primordia forma
in nares hominum, cum taetra cadavera torrent,
et cum scena croco Cilici perfusa recens est
araque Panchaeos exhalat propter odores;
neve bonos rerum simili constare colores
semine constituas, oculos qui pascere possunt,
et qui conpungunt aciem lacrimareque cogunt

ortus. *ortu* Lach.: comp. VI 909 *fit ortus*, and 1141. 390 *almus* B corr. Brix. Pont. *amnis* Mar. for *alimus*. 397 *cuiusque*. *coli usque* Bruno (Harburg 1872).
401 'oratio lenius decurret, si scribemus *pertorqueat*. sed potest ferri *pertorquent*' Lach. 403 *iucunde tangere* Nicc. for *iucundet tacere*. 413 *Mobilibus* Poli-

aut foeda specie diri turpesque videntur.
omnis enim, sensus quae mulcet cumque, *figura*
haut sine principiali aliquo levore creatast;
at contra quaecumque molesta atque aspera constat,
non aliquo sine materiae squalore repertast.
sunt etiam quae iam nec levia iure putantur
esse neque omnino flexis mucronibus unca,
sed magis angellis paulum prostantibus, *utqui*
titillare magis sensus quam laedere possint;
faecula iam quo de genere est inulaeque sapores.
denique iam calidos ignis gelidamque pruinam
dissimili dentata modo conpungere sensus
corporis, indicio nobis est tactus uterque.
tactus enim, tactus, pro divum numina sancta,
corporis est sensus, vel cum res extera sese
insinuat, vel cum laedit quae in corpore natast
aut iuvat egrediens genitalis per Veneris res,
aut ex offensu cum turbant corpore in ipso
semina confunduntque inter se concita sensum;
ut si forte manu quamvis iam corporis ipse
tute tibi partem ferias atque experiare.
quapropter longe formas distare necessest
principiis, varios quae possint edere sensus.
 Denique quae nobis durata ac spissa videntur,
haec magis hamatis inter sese esse necessest
et quasi ramosis alte compacta teneri.

tian marg. Flor. 29 and Nauger. for *nobilibus*. 421 *diri turpesque* Lach. for *di turpesque*. *fedi turpesque, qui olidi t., tetri t., turpes olidique* have all been read. *caeli turpesque* Nicc. and oldest eds. 422 *figura* Lach. after Schneidewin Phil. III p. 538 for *videntur* which has come from 421 and supplanted the feminine substantive. *quae mulcet causa iuvatque* Junt. *quae mulcet cunque iuvatque* Avanc. without sense; but at end of his ed. of Catullus he bids us read *quae mulcet causa iuvatque*. *mulctat causa iuvatque* Mar. apparently; but the words are much erased.
423 *levore* Avanc. for *leviore*. 427 *unca. uncaque* mss. 428 *utqui* added by Ed. and N. P. Howard. *et quae* Flor. 31 Camb. vulgo. *quaeque* Lach. *unde* Bern. *quique*, i.e. *angelli*, Ed. formerly: the *que* at end of 427 comes from the lost *utqui*. Then 429 *possint* A Nicc. Flor. 31 Camb., and (as I learn from Lach. p. 298) cod. Sangallens. schol. in Iuvenalem; rightly, as the subj. is necessary. *possunt* B Gott. vulg. Lach. 430 *inulaeque* Lamb. first for *inviaeque*. *vinique* Nicc. 437 *egrediens* Flor. 31 Camb. etc. for *grediens*. 438 *aut*: Lach. seems to me wrong in changing this to *atque*. 439 *que* added by Mar. Junt. vulgo. 451 *e* Lach.

in quo iam genere in primis adamantina saxa
prima acie constant ictus contemnere sueta
et validi silices ac duri robora ferri
aeraque quae claustris restantia vociferantur.
illa quidem debent e levibus atque rutundis
esse magis, fluvido quae corpore liquida constant;
NAMQUE PAPAVERIS HAUSTUS ITEMST FACILIS QUOD AQUARUM
nec retinentur enim inter se glomeramina quaeque
et procursus item proclive volubilis exstat.
omnia postremo quae puncto tempore cernis
diffugere, ut fumum nebulas flammasque, necessest,
si minus omnibu' sunt e levibus atque rutundis,
at non esse tamen perplexis indupedita,
pungere uti possint corpus penetrareque *vesca*
nec tamen haerere inter se; quodcumque videmus
sensibu' sedatum, facile ut cognoscere possis
non e perplexis sed acutis esse elementis.
sed quod amara vides eadem quae fluvida constant,
sudor uti maris est, minime mirabile habeto;
nam quod fluvidus est, e levibus atque rutundis
est, et *squalida multa creant* admixta doloris
corpora; nec tamen haec retineri hamata necessu*mst*;

for *ex*, as our mss. elsewhere have *e* before *l*. 452 *corpore* A corr. for *corpora*.
453 Lamb. justly ejects: it is quite out of place: does it refer to poppy seeds, or poppy juice? in the former case it is untrue, in the latter unmeaning: Lach. retains it, and for *quod* reads *quasi* after M. Haupt. 455 *procursus* Mar.? Junt. for *perculsus*. 456—463: a passage variously emended: the changes I have made are slight and I think not improbable. 458 *omnibu'* Lamb. after Muretus for *omnia*: comp. IV 82 where I read *Moenibu'* for *Moenia*. *omnino sint levibus* Pont. Junt. 460 *vesca* Ed. for *saxa*: with *penetrareque saxa* of mss. for *penetrareq. vesca* comp. VI 541 *summersosca* of mss. for *summersaq. saxa*; and VI 229 *sasca* mss. for *saxa*. *laxa* Ed. formerly. *sese* Lach. 462 *sedatum* of mss. I now keep: *sic latum* Ed. formerly: Lach. reads 461 *venenumst* for *videmus*, and 462 *sed rarum* for *sedatum*, making two changes. *Ventis esse datum* Bern. strangely for *Sensibus sedatum*. *Sentibus esse datum* Faber conjectures: but he thinks with Lamb. that 461—463 are spurious. 461 *quodcumque*. *quod quisque* Mar. Junt. vulg., wrongly joining this clause with the preceding. 465 *habeto* Ed. for *debet*. *habebis* Lach.: but he thinks *debet* may be right and a verse be lost, and this Bern. assumes. *est minime mirabile habendum* 3 Vat. Mon. Ald. 1 Junt. 'Marullus' says Gif. *cuiquam* Gif. 'Ita v. l.' i.e. Ver. Ven. he having the latter before him with Marullus' ms. emendations; among which Marullus had inserted the reading of his ms. Mon.: Brix. omits the word. 466 *fluvidus est*. *fluvidum est* Ver. Ven.

scilicet esse globosa tamen, cum squalida constent,
provolvi simul ut possint et laedere sensus.
et quo mixta putes magis aspera levibus esse
principiis, unde est Neptuni corpus acerbum,
est ratio secernendi; seorsumque videndi
umor dulcis, ubi per terras crebrius idem
percolatur, ut in foveam fluat ac mansuescat;
linquit enim supera taetri primordia viri,
aspera quo*m* magis in terris haerescere possint.
  Quod quoniam docui, pergam conectere rem quae
ex hoc apta fidem ducat, primordia rerum
finita variare figurarum ratione.
quod si non ita sit, rursum iam semina quaedam
esse infinito debebunt corporis auctu.
namque in eodem, una cuiusvis in brevitate
corporis inter se multum variare figurae
non possunt: fac enim minimis e partibus esse
corpora prima tribus, vel paulo pluribus auge;
nempe ubi eas partis unius corporis omnis,
summa atque ima locans, transmutans dextera laevis,
omnimodis expertus eris, quam quisque det ordo
formai speciem totius corporis eius,
quod superest, si forte voles variare figuras,
addendum partis alias erit, inde sequetur,

followed by all eds. before Lach. though the metre is thereby violated. 467 *Est e levibus atque rutundi admixta doloris Corporá* mss.: some of these words it is plain have come from 466 and supplanted the words of Lucr. *Est, et levibu' sunt aliunde* etc. Lach.: but he adds 'quamquam sic quoque mirationem faciunt illa *doloris Corpora*, quae sunt pungentia sensus et laedentia': quite true: Bern. reads *Est et squalida sunt illis* etc., and *squalida* indeed seems necessary: I have therefore written *Est, et squalida multa creant admixta doloris Corpora*: *doloris* being of course the accus. plur. 468 *necessumst* Lach. for *necessu*. 469 *constent* old eds. for *constet*. 471 *Et quo* Pont. Mar. Junt. for *Et quod*.
471—477: by a better punctuation and by doubling one letter I have rectified this passage; 473 I have placed a stop after *secernendi*, and removed that which all former editors have put after *videndi*, and 477 have written *quom magis* for *quo magis*. Lach. puts 476 before 474 and then leaves a most involved sentence. 474 *dulcis*. *dulcit* Gif. not Lamb.: Lamb. keeps *dulcis* ed. 1 and 2: he conjectures *acerbus* and reads *dulcet* ed. 3. 477 *possint*. *possunt* Mar. Junt. Lamb. vulgo. 483 *in eodem, una* Ed. for *in eadem una*. *eadem unius* Lach. 488 *transmutans* B corr. for *transmutas*. 497 *semina* A corr. for

adsimili ratione alias ut postulet ordo,
si tu forte voles etiam variare figuras.
ergo formarum novitatem corporis augmen
subsequitur. quare non est ut credere possis
esse infinitis distantia semina formis,
ne quaedam cogas inmani maximitate
esse, supra quod iam docui non posse probari.
iam tibi barbaricae vestes Meliboeaque fulgens
purpura Thessalico concharum tacta colore
. . . .
aurea pavonum ridenti imbuta lepore
saecla, novo rerum superata colore iacerent
et contemptus odor smyrnae mellisque sapores,
et cycnea mele Phoebeaque daedala chordis
carmina consimili ratione oppressa silerent;
namque aliis aliud praestantius exoreretur.
cedere item retro possent in deteriores
omnia sic partis, ut diximus in melioris;
namque aliis aliud retro quoque taetrius esset
naribus auribus atque oculis orisque sapori.
quae quoniam non sunt, *sed* rebus reddita certa
finis utrimque tenet summam, fateare necessest
materiem quoque finitis differre figuris.
denique ab ignibus ad gelidas iter usque pruinas
finitumst retroque pari ratione remensumst;
omnis enim calor ac frigus mediique tepores
interutrasque iacent explentes ordine summam.
ergo finita distant ratione creata,

femina. 499 *probari* Ald. 1 Junt. for *probare.* *esse probare* Mar. 501: I believe a verse is here lost of this nature *et quos ostendunt in solis luce colores.* *tacta* Lach. after Oudendorp Lucan x 491 for *tecta.* *tincta* Junt. vulg. 502 *ridenti* Fr. Medices for *rident* and 503 *novo* for *nova.* *Aurea, p. ridenti imitata* etc. Lach.: Lamb. and vulg. edd. *et* at end of 501. 503 *Saecla.* *Pepla* P. Burmann Wak. 504 *Et contemptus odor* Flor. 31 Camb. Brix. Ven. Mar. vulg. for *Et contemptus udor.* *Et contemptus suodor* Nicc. Ver.: hence I infer the ms. of Poggio had *sudor* (with *o* written above). 512 *sed* added by Lach. 514 *finitis* Politian (?), Pont. Mar. Ald. 1 Junt. for *infinitis.* 515 *iter usque* Lach. for *hiemisque.* perhaps *hiemum usque.* 517 *Omnis* of mss. is right. *Extima* Ed. formerly. *Ambit* Lach. *Finis* Mar. Junt. *Finit* Lamb. vulgo. 518 *Interutrasque*: see notes 2. *Inter utrasque* mss. *Interutraque* Lach. here and in five other places, v 472 476 vi 362 1062, and iii 306 where I read *Inter utrosque*, and v 839 for *inter*

ancipiti quoniam mucroni utrimque notantur,
hinc flammis illinc rigidis infesta pruinis.
  Quod quoniam docui, pergam conectere rem quae
ex hoc apta fidem ducat, primordia rerum,
inter se simili quae sunt perfecta figura,
infinita cluere. etenim distantia cum sit
formarum finita, necesse est quae similes sint
esse infinitas aut summam materiai
finitam constare, id quod non esse probavi
versibus ostendens corpuscula materiai
ex infinito summam rerum usque tenere,
undique protelo plagarum continuato.
nam quod rara vides magis esse animalia quaedam
fecundamque minus naturam cernis in illis,
at regione locoque alio terrisque remotis
multa licet genere esse in eo numerumque repleri;
sicut quadripedum cum primis esse videmus
in genere anguimanus elephantos, India quorum
milibus e multis vallo munitur eburno,
ut penitus nequeat penetrari: tanta ferarum
vis est, quarum nos perpauca exempla videmus.
sed tamen id quoque uti concedam, quamlubet esto
unica res quaedam nativo corpore sola,

utras. 521 *infesta* Lach. for *infessa*, and so Lamb. in notes, *insessd* in text after Mar. Junt. *infensa* Flor. 31 Vat. 1954 Othob. old eds.

522—568: this passage I have fully discussed in Camb. Journ. of phil. iv p. 143 etc. where I have shewn that Lach. is quite wrong in enclosing 522—528 in brackets, and beginning a new paragraph at 529, and there reading *Protinus* for *Versibus*: he gives us the alternative, which Bern. has adopted, of assuming one or more verses to have been lost before *Versibus*; and indeed all before him from Mar. Ald. 1 and Junt. downwards have inserted this line, *Quod quoniam docui, nunc suaviloquis age paucis.* Victorius in his copy of Marullus' notes has not this line; but, for *Versibus, Nunc vero*, Marullus' first thought, answering to Lachmann's *Protinus.* No stop is to be put at the end of 528, and 529 *ostendens* is to be read for *ostendam*; and then all difficulty vanishes. 533 *minus* Lamb. most rightly for *magis* which Wak. absurdly tries to explain. 535 *genere* Mar.? Junt. for *genera.* 536 *Sicut* Bentl. for *Sicuti*: iii 816 mss. have the same error. Lachmann's note shews the strange tendency of mss. to read *sicuti* for *sicut*, as above *veluti* for *velut*: in the passage he quotes from Plautus mil. 727, it now appears from Ritschl that the Ambrosian palimpsest has rightly *sicut*: Cic. Arat. 131 on the other hand Orelli reads *Sicutĭ cum cœptant*: Cic. de senect. 14, though the latest editors read the verse of Ennius *Sic ut fortis equus*, 5 of their 6 mss. have *Sicuti.*

541 *lubet* B corr. Flor. 31 Camb. for *iubet.* 543 *nulla* added by Lach. *non*

cui similis toto terrarum *nulla* sit orbi;
infinita tamen nisi erit vis materiai
unde ea progigni possit concepta, creari
non poterit, neque, quod superest, procrescere alique.
quippe etenim sumam hoc quoque uti finita per omne
corpora iactari unius genitalia rei,
unde ubi qua vi et quo pacto congressa coibunt
materiae tanto in pelago turbaque aliena?
non, ut opinor, habent rationem conciliandi;
sed quasi naufragiis magnis multisque coortis
disiectare solet magnum mare transtra guberna
antemnas proram malos tonsasque natantis,
per terrarum omnis oras fluitantia aplustra
ut videantur et indicium mortalibus edant,
infidi maris insidias virisque dolumque
ut vitare velint, neve ullo tempore credant,
subdola cum ridet placidi pellacia ponti,
sic tibi si finita semel primordia quaedam
constitues, aevom debebunt sparsa per omnem
disiectare aestus diversi materiai,
numquam in concilium ut possint compulsa coire
nec remorari in concilio nec crescere adaucta;
quorum utrumque palam fieri manifesta docet res,
et res progigni et genitas procrescere posse.
esse igitur genere in quovis primordia rerum
infinita palam est unde omnia suppeditantur.
Nec superare queunt motus itaque exitiales
perpetuo neque in aeternum sepelire salutem,
nec porro rerum genitales auctificique
motus perpetuo possunt servare creata.
sic aequo geritur certamine principiorum
ex infinito contractum tempore bellum:
nunc hic nunc illic superant vitalia rerum

sit in orbi B corr. *non sit in orbe* Nicc. Flor. 31 Camb. Mon. vulgo: perhaps rightly. 547 *sumam hoc quoque uti* Ed. for the meaningless *sumant oculi*: comp. 541. *si manticuler* Lach. strangely. Wak. tells us that Bentl. obelised the words; and it is strange that all editors before Wak., even Junt. and Lamb., left them unnoticed: Wak. conj. *sumant ollei.* 553 *guberna* Lamb. for *caverna. carinas* Nicc. 555 *aplustra* Politian Mar. Junt. for *plaustra* A, *plaustra* B Nicc. Camb. 560 *si finita* B corr. Ver. Ven. Mar. for *si infinita.*

et superantur item. miscetur funere vagor
quem pueri tollunt visentis luminis oras;
nec nox ulla diem neque noctem aurora secutast
quae non audierit mixtos vagitibus aegris
ploratus mortis comites et funeris atri.
Illud in his obsignatum quoque rebus habere
convenit et memori mandatum mente tenere,
nil esse, in promptu quorum natura videtur,
quod genere ex uno consistat principiorum,
nec quicquam quod non permixto semine constet.
et quodcumque magis vis multas possidet in se
atque potestates, ita plurima principiorum
in sese genera ac varias docet esse figuras.
principio tellus habet in se corpora prima
unde mare inmensum volventes frigora fontes
adsidue renovent, habet ignes unde oriantur.
nam multis succensa locis ardent sola terrae,
eximiis vero furit ignibus impetus Aetnae.
tum porro nitidas fruges arbustaque laeta
gentibus humanis habet unde extollere possit,
unde etiam fluvios frondes et pabula laeta
montivago generi possit praebere ferarum.
quare magna deum mater materque ferarum
et nostri genetrix haec dicta est corporis una.
Hanc veteres Graium docti cecinere poetae
. . . .
sedibus in curru biiugos agitare leones,
aeris in spatio magnam pendere docentes
tellurem neque posse in terra sistere terram.
adiunxere feras, quia quamvis effera proles
officiis debet molliri victa parentum.

586 *quod cumque* Lach. for *quaecumque*: previous editors have gone much astray. 593 (and 607) *Eximiis* Avanc. for *Ex imis.* 'Sic v. l. o. ... Marull. ex Virg. lib. 5, *ex imis*, contra v. l.': the 'veteres libri omnes' are only the Ven. in which were Marullus' ms. notes: Ven. has *Eximis* which Gif. probably read *Eximiis*: Marullus perhaps referred to Aen. III 577 *fundoque exaestuat imo*, and divided the word: he makes no change in cod. Victor. 601: Lach. with reason supposes a verse to be lost here, which he thus supplies, *Magnifice divam ex ipsis penetralibu' vectam Sedibus.* Lamb. reads *Sublimem* for *Sedibus.* 605 *molliri* Nicc. Flor. 31 Camb. for *moliri.* 613 *orbem* Pont. Junt.

muralique caput summum cinxere corona,
eximiis munita locis quia sustinet urbes;
quo nunc insigni per magnas praedita terras
horrifice fertur divinae matris imago.
hanc variae gentes antiquo more sacrorum
Idaeam vocitant matrem Phrygiasque catervas
dant comites, quia primum ex illis finibus edunt
per terrarum orbem fruges coepisse creari.
gallos attribuunt, quia, numen qui violarint
matris et ingrati genitoribus inventi sint,
significare volunt indignos esse putandos,
vivam progeniem qui in oras luminis edant.
tympana tenta tonant palmis et cymbala circum
concava, raucisonoque minantur cornua cantu,
et Phrygio stimulat numero cava tibia mentis,
telaque praeportant violenti signa furoris,
ingratos animos atque impia pectora volgi
conterrere metu quae possint numini' divae.
ergo cum primum magnas invecta per urbis
munificat tacita mortalis muta salute,
aere atque argento sternunt iter omne viarum
largifica stipe ditantes ninguntque rosarum
floribus umbrantes matrem comitumque catervas.
hic armata manus, Curetas nomine Grai
quos memorant Phrygios, inter se forte *quod armis*
ludunt in numerumque exultant sanguinolenti
terrificas capitum quatientes numine cristas,

for *orbes*. 615 *Matris* Flor. 31 Camb. for *Matri*. *sint* Lamb. first for *sunt*: Lach. says nothing; but Ed. as well as Heins. ms. notes and Goebel Rh. Mus. n. f. xv p. 414 found *inventi sunt* in AB. *sint inventi* Lach.: I prefer the rhythm of the ms. order. 623 *metu...numini' divae* Lach. at the suggestion of an 'amicus quidam' of Haverc. for *metu...numine divae*. 626 *iter omne viarum* Turnebus Gif. Lamb. ed. 2 and 3, vulg. for *ite omnia virum*: a certain correction. *ita omnia mirum* Nicc. some Vat. and old eds. *iter, omnia circum* Flor. 31 Camb. some Vat. Pont. Mar. Junt. Lamb. ed. 1. 630 *quod armis* a certain correction of Lach.: the sentence requiring the conjunction *quod* or *quia*, the sense *armis*. *catervas* of mss. is a mere blunder of the scribe who has taken it from 628: a form of error common in our mss.: comp. 422 I 555 VI 15 etc. *catenas* of B is again a mere miswriting of *cateruas*, though it has deceived many. *choreas* Pont.
631 *sanguinolenti* Bentl. for *sanguine fleti*. *sanguine freti* Nicc. and old eds. *sanguine laeti* Pont. Junt. Lamb. 632 *numine*. *momine* Lach. whom I followed

Dictaeos referunt Curetas qui Iovis illum
vagitum in Creta quondam occultasse feruntur,
cum pueri circum puerum pernice chorea
armatei in numerum pulsarent aeribus aera,
ne Saturnus eum malis mandaret adeptus
aeternumque daret matri sub pectore volnus.
propterea magnam armati matrem comitantur,
aut quia significant divam praedicere ut armis
ac virtute velint patriam defendere terram
praesidioque parent decorique parentibus esse.
quae bene et eximie quamvis disposta ferantur,
longe sunt tamen a vera ratione repulsa.
omnis enim per se divom natura necessest
inmortali aevo summa cum pace fruatur
semota ab nostris rebus seiunctaque longe;
nam privata dolore omni, privata periclis,
ipsa suis pollens opibus, nil indiga nostri,
nec bene promeritis capitur neque tangitur ira.
655 hic siquis mare Neptunum Cereremque vocare
constituit fruges et Bacchi nomine abuti
mavolt quam laticis proprium proferre vocamen,
concedamus ut hic terrarum dictitet orbem
esse deum matrem, dum vera re tamen ipse
680 religione animum turpi contingere parcat.
652 terra quidem vero caret omni tempore sensu,
et quia multarum potitur primordia rerum,
multa modis multis effert in lumina solis.
660 Saepe itaque ex uno tondentes gramina campo
lanigerae pecudes et equorum duellica proles
buceriaeque greges eodem sub tegmine caeli

in my small ed.: but see Ph. Wagner in Philologus supplement I p. 400, Conington to Aen. II 123 and Lachmann's own note: comp. also IV 179. 636 *Armat et in numerum pernice chorea*: omitted by Pont. and Lamb. as manifestly made up out of 635 and 637. 653 *Constituit* Lach. for *Constituet*, as *mavolt* follows. 657 (680): this verse, which was the last of p. 73 of the archetype, has been transferred hither by Lach.: the scribe omitted it in its place and then wrote it at the bottom of the page. Pontanus acutely sees that both the vss. as given in mss. are fragmentary. *parcat* Lach. for *parato*. *parco* Flor. 31 Camb. etc.
658—660 (652—654) I have transferred hither: the *itaque* of 661 manifestly refers to them; so that if they are to keep their place, then (what comes to much the

ex unoque sitim sedantes flumine aquai
dissimili vivont specie retinentque parentum
naturam et mores generatim quaeque imitantur.
tanta est in quovis genere herbae materiai
dissimilis ratio, tanta est in flumine quoque.
hinc porro quamvis animantem ex omnibus unam
ossa cruor venae calor umor viscera nervi
constituunt; quae sunt porro distantia longe,
dissimili perfecta figura principiorum.
tum porro quaecumque igni flammata cremantur,
si nil praeterea, tamen haec in corpore condunt
unde ignem iacere et lumen summittere possint
scintillasque agere ac late differre favillam.
cetera consimili mentis ratione peragrans
invenies igitur multarum semina rerum
corpore celare et varias cohibere figuras.
denique multa vides quibus et color et sapor una
reddita sunt cum odore: in primis pleraque dona
. . . .
haec igitur variis debent constare figuris;
nidor enim penetrat qua fucus non it in artus,
fucus item sorsum, *sorsum* sapor insinuatur
sensibus; ut noscas primis differre figuris.
dissimiles igitur formae glomeramen in unum
conveniunt et res permixto semine constant.

same thing) 652—657 must be enclosed in brackets as a subsequent marginal addition of the poet's: see above, p. 29. 664 *sedantes* Nicc. B corr. for *sedentes.* Brieger puts this v. before 662. 665 *retinentque parentum* Flor. 31 Vat. 1136 Othob. 1954 Othob. s.m. Mar. Ald. 1 Junt. for *retinente parente.*

669 *quamvis...unam* Lamb. for *quamvis...una.* *quemvis...unā* Nicc. *quemvis...unum* Mar. Junt. 674 *condunt* Ed. for *traduntur.* *celant* Lach. *cludunt* Bern. 675 *ignem* Nicc. for *igne.* *ignes* B corr. 681 a v. is lost here such as *Quis accensa solent fumare altaria divom*: see notes 2: not a letter of the mss. is to be changed. *in privis pluraque dona* Lach. In consequence of 657 (680) having been misplaced the older editors have made strange confusion here. 683 684 *fucus...Fucus* Lach. most properly for *sucus...Sucus*: 'nam *fucus* color est'.

684 *sorsum* AB only once. '*seorsum et rerum* [Faber's text]. *et rerum* om. mss. vv. repetendum ut puto *τὸ sorsum* G.V.' ms. notes of Is. Vossius. Haverc. and through him Lach. misrepresent him: 'G.V.' is of course his father Gerard, whose reading therefore is the same as Lachmann's. 685 *primis* of mss. I now keep: see notes 2: *privis* Lach. after Vossius, Preiger, Haverc. who says 'egregie et hoc loco *privis* habet Marginalis noster': my ms. notes of Vossius are without

quin etiam passim nostris in versibus ipsis
multa elementa vides multis communia verbis,
cum tamen inter se versus ac verba necesse est
confiteare alia ex aliis constare elementis;
non quo multa parum communis littera currat
aut nulla inter se duo sint ex omnibus isdem,
sed quia non volgo paria omnibus omnia constant.
sic aliis in rebus item communia multa
multarum rerum cum sint primordia, verum
dissimili tamen inter se consistere summa
possunt; ut merito ex aliis constare feratur
humanum genus et fruges arbustaque laeta.

Nec tamen omnimodis conecti posse putandum est
omnia; nam volgo fieri portenta videres,
semiferas hominum species existere et altos
interdum ramos egigni corpore vivo,
multaque conecti terrestria membra marinis,
tum flammam taetro spirantis ore Chimaeras
pascere naturam per terras omniparentis.
quorum nil fieri manifestum est, omnia quando
seminibus certis certa genetrice creata
conservare genus crescentia posse videmus.
scilicet id certa fieri ratione necessust.
nam sua cuique cibis ex omnibus intus in artus
corpora discedunt conexaque convenientis
efficiunt motus; at contra aliena videmus
reicere in terras naturam, multaque caecis
corporibus fugiunt e corpore percita plagis,
quae neque conecti quoquam potuere neque intus
vitalis motus consentire atque imitari.
sed ne forte putes animalia sola teneri

it. 693 *isdem* Lamb. for *idem*: 'quod est sane simplicissimum, sed videtur abhorrere ab usu Lucretii' says Lach. who reads awkwardly *nulli* for *nulla*, and *idem.* But here and v 349 Lucr. unquestionably used *isdem,* as did his contemporaries. 694 *constant* Ed. with B Nicc. (?), Camb. Mon. Lamb. vulg. *constent* Lach. with A corr.: see 337. 696 for *rerum* 'f. verum G.V.' in Isaac's ms. notes: and before him Pont.; and so Lach.: yet *longe* of Flor. 31 Camb. Mar. may be right, as the scribe might well write *primordia rerum* mechanically from the mere fact of these words so often coming together. 716 *intus* Lach. for *inte.* *inter* B corr. Camb. *intra* Nicc.: *consentire* is here transitive.

legibus hisce, ea res ratio disterminat omnis.
nam veluti tota natura dissimiles sunt
inter se genitae res quaeque, ita quamque necessest
dissimili constare figura principiorum;
non quo multa parum simili sint praedita forma,
sed quia non volgo paria omnibus omnia constant.
semina cum porro distent, differre necessust
intervalla vias conexus pondera plagas
concursus motus, quae non animalia solum
corpora seiungunt, sed terras ac mare totum
secernunt caelumque a terris omne retentant.
  Nunc age dicta meo dulci quaesita labore
percipe, ne forte haec albis ex alba rearis
principiis esse, ante oculos quae candida cernis,
aut ea quae nigrant nigro de semine nata;
nive alium quemvis quae sunt inbuta colorem,
propterea gerere hunc credas, quod materiai
corpora consimili sint eius tincta colore.
nullus enim color est omnino materiai
corporibus, neque par rebus neque denique dispar.
in quae corpora si nullus tibi forte videtur
posse animi iniectus fieri, procul avius erras.
nam cum caecigeni, solis qui lumina numquam
dispexere, tamen cognoscant corpora tactu,
ex ineunte aevo nullo coniuncta colore,
scire licet nostrae quoque menti corpora posse
vorti in notitiam nullo circumlita fuco.

in se Bern. which I don't understand. *inde* Brieger. 719 *Legibus his quaedam ratio disterminat omnis* mss. *omnia* Lach. after Junt. as in I 1106 without authority: *omnia* I doubt not comes from Marullus, as he uses it in the same way in his hymn to earth at the end of a passage partly quoted p. 7 in which Lucr. is closely imitated: see also reading of Junt. in 749; [the cod. Victor. proves my inference to be correct here and 749: Marullus cites Virgil's *quin protinus omnia Perlegerent oculis*]. *hisce eadem r. d. omne* Bern.: but *omne* is hardly thus used; therefore I read *hisce ea res r. d. omnis*: *quaedam* has no meaning. 721 *ita quanque* Junt. for *ita cumque.* 724 *constant* Ed. *constent* AB vulg. Lach.: see 337 and 694. 734 *colorem* Nicc. vulg. for *colore*: Lamb. and Lach. deny that *imbuta colorem* is Latin; but see notes 2. Lach. reads *Nive alium quemvis quo sunt inbuta colore*, cet.; but the nominative *quae* is absolutely required here. *induta* Lamb. for *inbuta.* 741 *lumina* Flor. 31 Camb. etc. for *numina.* 742 *Dispexere* Nicc. corr. Avanc. for *Despexere.* *Aspexere* Junt. Lamb. 743 Bentl.

denique nos ipsi caecis quaecumque tenebris
tangimus, haud ullo sentimus tincta colore.
quod quoniam vinco fieri, nunc esse docebo
omnis enim color omnino mutatur in omnis;
quod facere haud ullo debent primordia pacto;
immutabile enim quiddam superare necessest,
ne res ad nilum redigantur funditus omnes.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante.
proinde colore cave contingas semina rerum,
ne tibi res redeant ad nilum funditus omnes.
  Praeterea si nulla coloris principiis est
reddita natura et variis sunt praedita formis,
e quibus omne genus gignunt variantque colores
propterea, magni quod refert semina quaeque
cum quibus et quali positura contineantur
et quos inter se dent motus accipiantque,
perfacile extemplo rationem reddere possis
cur ea quae nigro fuerint paulo ante colore,
marmoreo fieri possint candore repente;
ut mare, cum magni commorunt aequora venti,
vertitur in canos candenti marmore fluctus;
dicere enim possis, nigrum quod saepe videmus,
materies ubi permixta est illius et ordo
principiis mutatus et addita demptaque quaedam,
continuo id fieri ut candens videatur et album.
quod si caeruleis constarent aequora ponti
seminibus, nullo possent albescere pacto;
nam quocumque modo perturbes caerula quae sint,
numquam in marmoreum possunt migrare colorem.
sin alio atque alio sunt semina tincta colore
quae maris efficiunt unum purumque nitorem,
ut saepe ex aliis formis variisque figuris

and Lach. place after 748: but see notes 2. 748 a v. is lost here. 749 *in omnis* Flor. 31 Camb. Nauger. for *et omnis.* *in omnia* Junt. after Marullus: see note to 719. 759 *omne genus* Lach. for *omnigenus.* *omnigenos* A corr. Nicc. Flor. 31 Camb. vulg. 760 *Propterea* Nicc. corr. Flor. 31 Camb. Mar. Junt. Lamb. ed. 1 for *Praeterea* which Wak. and, strange to say, Lamb. ed. 2 and 3 retain.
763 *extemplo* Brix. Lamb. for *exemplo.* 765 *possint* Lamb. for *possunt.*

efficitur quiddam quadratum unaque figura,
conveniebat, ut in quadrato cernimus esse
dissimiles formas, ita cernere in aequore ponti
aut alio in quovis uno puroque nitore
dissimiles longe inter se variosque colores.
praeterea nil officiunt obstantque figurae
dissimiles quo quadratum minus omne sit extra;
at varii rerum inpediunt prohibentque colores
quominus esse uno possit res tota nitore.

Tum porro quae ducit et inlicit ut tribuamus
principiis rerum nonnumquam causa colores,
occidit, ex albis quoniam non alba creantur,
nec quae nigra cluent de nigris sed variis ex.
quippe etenim multo proclivius exorientur
candida de nullo quam nigro nata colore
aut alio quovis qui contra pugnet et obstet.

Praeterea quoniam nequeunt sine luce colores
esse neque in lucem existunt primordia rerum,
scire licet quam sint nullo velata colore.
qualis enim caecis poterit color esse tenebris?
lumine quin ipso mutatur propterea quod
recta aut obliqua percussus luce refulget;
pluma columbarum quo pacto in sole videtur,
quae sita cervices circum collumque coronat;
namque alias fit uti claro sit rubra pyropo,
interdum quodam sensu fit uti videatur
inter curalium viridis miscere zmaragdos.
caudaque pavonis, larga cum luce repleta est,
consimili mutat ratione obversa colores;

779 *unaque figura* Nicc. for *unaque figuras*. *unaque figura est* Flor. 31 Camb. Mar. Junt. *unaeque figurae* Lamb. after Muretus; 'contra consuetudinem Lucretii' says Lach. 780 *ut in* Lach. for *uti in*: see 322. 781 *in aequore* Ver. Ven. Politian (?) Mar. Junt. for *in aequora*. 783 *colores* Nicc. for *calores*.

785 *extra* seems quite appropriate: Lach. reads *ex his*. 788 *ducit et inlicit ut tribuamus* Lamb. and Turneb. for *ducit et inlicitu tribuamus* (*et* om. A Nicc.). *ducit in licitum ut tribuamus* Camb. *ut illicitum hoc tribuamus* Mar. Junt.

790 *creantur* Nicc. for *creatur*. 791 *Nec quae* Flor. 31 Camb. for *Neque*. *variis ex* Wak. for *variis ea*. *variata* Pont. *variantur* Mar. Junt. *variant se* Ald. 1. 800 *refulget*. *refulgit* Lach. 802 *cervices*. *cervicemst* Brieger.

803 *rubra* Flor. 31 Camb. Mon. Ver. Ven. for *rubro*. 805 *curalium* Wak. for *caeruleum*. 'fo. *beryllum*' Bentl. 806 *larga cum luce* Nicc. B. corr. for *largo cum luce* which may be right. 809 *Scire licet*. *Scilicet id* Lamb. *est* om. Nicc. 814 *sint* Ald. 1 Junt. not Mar. for *sunt*. 815 *opus esse colores* Lamb. after Nonius for *colore* of mss.: see Lach. 821 *Omne genus* Lach. for *Omnigenus*, as 759. *Omnigenis* Nicc. vulg. 829 *austrum*. *ostrum* Wak. conj. for *aurum*: but the right punctuation I owe to Goebel quaest. Lucr. crit. p. 14, though Ven. Ald. 1 and Junt. have a full stop after *aurum*. *aurea Purpura* and 831 *distracta* for *distractum* Lach. without judgment. *aurum* which previous editors retain has no sense. *usu* Bern. for *aurum*. 831 *dispergitur* Lach.

qui quoniam quodam gignuntur luminis ictu,
scire licet, sine eo fieri non posse putandum est.
et quoniam plagae quoddam genus excipit in se
pupula, cum sentire colorem dicitur album,
atque aliud porro, nigrum cum et cetera sentit,
nec refert ea quae tangas quo forte colore
praedita sint, verum quali magis apta figura,
scire licet nil principiis opus esse colores,
sed variis formis variantes edere tactus.

Praeterea quoniam non certis certa figuris
est natura coloris et omnia principiorum
formamenta queunt in quovis esse nitore,
cur ea quae constant ex illis non pariter sunt
omne genus perfusa coloribus in genere omni?
conveniebat enim corvos quoque saepe volantis
ex albis album pinnis iactare colorem,
et nigros fieri nigro de semine cycnos
aut alio quovis uno varioque colore.

Quin etiam quanto in partes res quaeque minutas
distrahitur magis, hoc magis est ut cernere possis
evanescere paulatim stinguique colorem;
ut fit ubi in parvas partis discerpitur austrum:
purpura poeniceusque color clarissimu' multo,
filatim cum distractum est, dispergitur omnis;
noscere ut hinc possis prius omnem efflare colorem
particulas quam discedant ad semina rerum.

Postremo quoniam non omnia corpora vocem
mittere concedis neque odorem, propterea fit
ut non omnibus adtribuas sonitus et odores.
sic oculis quoniam non omnia cernere quimus,
scire licet quaedam tam constare orba colore
quam sine odore ullo quaedam sonituque remota,

nec minus haec animum cognoscere posse sagacem
quam quae sunt aliis rebus privata notare.
Sed ne forte putes solo spoliata colore
corpora prima manere, etiam secreta teporis
sunt ac frigoris omnino calidique vaporis,
et sonitu sterila et suco ieiuna feruntur,
nec iaciunt ullum proprium de corpore odorem.
sicut amaracini blandum stactaeque liquorem
et nardi florem, nectar qui naribus halat,
cum facere instituas, cum primis quaerere par est,
quoad licet ac possis reperire, inolentis olivi
naturam, nullam quae mittat naribus auram,
quam minime ut possit mixtos in corpore odores
concoctosque suo contractans perdere viro,
propter eandem *rem* debent primordia rerum
non adhibere suum gignundis rebus odorem
nec sonitum, quoniam nil ab se mittere possunt,
nec simili ratione saporem denique quemquam
nec frigus neque item calidum tepidumque vaporem,
cetera; quae cum ita sunt tamen ut mortalia constent,
molli lenta, fragosa putri, cava corpore raro,
omnia sint a principiis seiuncta necessest,
inmortalia si volumus subiungere rebus
fundamenta quibus nitatur summa salutis;
ne tibi res redeant ad nilum funditus omnes.
Nunc ea quae sentire videmus cumque necessest
ex insensilibus tamen omnia confiteare
principiis constare. neque id manufesta refutant
nec contra pugnant, in promptu cognita quae sunt,
sed magis ipsa manu ducunt et credere cogunt
ex insensilibus, quod dico, animalia gigni.
quippe videre licet vivos existere vermes
stercore de taetro, putorem cum sibi nacta est

for *disperditur*. 841 *notare* Lach. for *notaque*. 845 *ieiuna* Flor. 31 Camb. etc. for *et una*. 846 *proprium*. *proprio* Lach. with Junt. not Mar.; but compare 855. *ullo* Pont. 850 *possis*. *potis es* Lamb. Lach.: see notes 2. 853 *contractans* Lach., and some mss. of Priscian VI 91 for *contractas*. *contractos* vulg. *servare* (*superare* Forbig.) *et perdere* Nonius p. 188.
854 *Propter eandem rem* Lach. most truly for *Propter eandem*. *Propterea tandem* Flor. 31 Camb. Mar., *Propterea demum* Lamb., absurdly. 860 *Molli*

intempestivis ex imbribus umida tellus;
praeterea cunctas itidem res vertere sese.
vertunt se fluvii frondes et pabula laeta
in pecudes, vertunt pecudes in corpora nostra
naturam, et nostro de corpore saepe ferarum
augescunt vires et corpora pennipotentum.
ergo omnes natura cibos in corpora viva
vertit et hinc sensus animantum procreat omnes,
non alia longe ratione adque arida ligna
explicat in flammas et *in* ignis omnia versat.
iamne vides igitur magni primordia rerum
referre in quali sint ordine quaeque locata
et commixta quibus dent motus accipiantque?
Tum porro quid id est, animum quod percutit, ipsum
quod movet et varios sensus expromere cogit,
ex insensilibus ne credas sensile gigni?
nimirum lapides et ligna et terra quod una
mixta tamen nequeunt vitalem reddere sensum.
illud in his igitur rebus meminisse decebit,
non ex omnibus omnino, quaecumque creant res,
sensile et extemplo me gigni dicere sensus,
sed magni referre ea primum quantula constent,
sensile quae faciunt, et qua sint praedita forma,
motibus ordinibus posituris denique quae sint.
quarum nil rerum in lignis glaebisque videmus;
et tamen haec, cum sunt quasi putrefacta per imbres,
vermiculos pariunt, quia corpora materiai
antiquis ex ordinibus permota nova re
conciliantur ita ut debent animalia gigni.
deinde ex sensilibus qui sensile posse creari
constituunt, porro ex aliis sentire suëti .

Lamb. after Turnebus for *Mollia*. 875 *fluvii frondes* Lamb. for *fluvii in frondes*. 882 *in ignis* Flor. 31 Camb. Pont. Mar. etc. for *ignis*. 888 *gigni*. *nasci* Priscian IV 27: see above p. 1. 891 *rebus* Avanc. for *fedus*. *foedus* Wak. absurdly. 893 *Sensile* Nicc. for *Sensilia*. *et extemplo* Nauger. and a late corrector of the cod. Victor. who more than once agrees with, probably follows Naugerius, for *etemplo*. 903 a v. is lost here such as *Ipsi sensilibus, mortalia semina reddunt* (or *habebunt*): Christ I now find suggests a v. has dropped out. I do not alter a letter of the mss.: Lach. in 902 reads *ea* for *ex*, *seminibus* for *sensilibus*, and 903 *suëtis* with Lamb., and 904 *iam* for *cum*. *tum* Lamb.

. . . .
mollia cum faciunt. nam sensus iungitur omnis
visceribus nervis venis, quae cuique videmus
mollia mortali consistere corpore creta.
sed tamen esto iam posse haec aeterna manere:
nempe tamen debent aut sensum partis habere
aut simili totis animalibus esse putari.
at nequeant per se partes sentire necesse est;
namque alio sensus membrorum respicit omnis,
nec manus a nobis potis est secreta neque ulla
corporis omnino sensum pars sola tenere.
linquitur ut totis animantibus adsimulentur.
923 sic itidem quae sentimus sentire necessest,
915 vitali ut possint consentire undique sensu.
qui poterunt igitur rerum primordia dici
et leti vitare vias, animalia cum sint,
adque animalia *sint* mortalibus una eademque?
quod tamen ut possint, at coetu concilioque
920 nil facient praeter volgum turbamque animantum,
scilicet ut nequeant homines armenta feraeque
inter sese ullam rem gignere conveniundo.
924 quod si forte suum dimittunt corpore sensum
atque alium capiunt, quid opus fuit adtribui id quod
detrahitur? tum praeterea, quo fugimus ante,
quatenus in pullos animalis vertier ova
cernimus alituum vermisque effervere, terram
intempestivos quom putor cepit ob imbris,
scire licet gigni posse ex non sensibu' sensus.
Quod si forte aliquis dicet dumtaxat oriri

905 *cuique* Ed. for *cumque*. *cuncta* Lach. 909 *simili* Lach. for *similis*. 910 *At* Mar. Junt. for *Aut*. 911 *alio* Lach. for *alios*, *respicit* for *respuit*. *Nam ratio* Bern. for *Namque alios*, retaining *respuit*. 915 (923) I follow Bern. in placing this verse here, rather than Lach. who makes it follow 916 (915).
919 *animalia sint* Lach. for *animalibus*: comp. 458 and IV 81: *sint* was added by Mar. and Junt. 920 *at coetu* Mon. Lach. for *ab eoretu*. *ab coetu* Junt. *concretu* Politian in marg. Flor. 29. 922 *nequeant*. *nequeunt* Gif. Bentl. Lach.: but the potential is in place. 926 *quo fugimus* Wak. for *quod fugimus* which Lach. in vain defends: the poet refers to 870 sqq., not to 886. *quod vicimus* Ed. in small ed. 928 *effervere, terram Intempestivos quom (cum) putor cepit* Mar. for *offervere t. Intempestivus quam p. cepit* A, *coepit* B. *effervere* Nicc.

posse a non sensu sensum mutabilitate,
aut aliquo tamquam partu quod proditus extet,
huic satis illud erit planum facere atque probare
non fieri partum nisi concilio ante coacto
nec quicquam commutari sine conciliatu.
principio nequeunt ullius corporis esse
sensus ante ipsam genitam naturam animantis,
nimirum quia materies disiecta tenetur
aere fluminibus terris terraque creatis,
nec congressa modo vitalis convenienti
contulit inter se motus, quibus omnituentes
accensi sensus animante in quaque cientur.
Praeterea quamvis animantem grandior ictus,
quam patitur natura, repente adfligit et omnis
corporis atque animi pergit confundere sensus.
dissoluuntur enim positurae principiorum
et penitus motus vitales inpediuntur,
donec materies, omnis concussa per artus,
vitalis animae nodos a corpore solvit
dispersamque foras per caulas eiecit omnis.
nam quid praeterea facere ictum posse reamur
oblatum, nisi discutere ac dissolvere quaeque?
fit quoque uti soleant minus oblato acriter ictu
reliqüi motus vitalis vincere saepe,
vincere, et ingentis plagae sedare tumultus
inque suos quicquid rursus revocare meatus

coepit Junt. *putror* Lamb. 932 *Posse a non sensu* Wak. for *Posse ea non sensu*, rather better than *Posse ex* of Lamb. Lach. etc. *e* Pont. *sensum mutabilitate* Lamb. ed. 3 in note for *sensus mut.* Lach. keeps *sensus*. 933 *quod proditus extet* Ed. for *quod proditum extra*. *quod protinus extent* Lach. *quod proditur extra* Pont. Bern.; but the oratio obliqua requires the subjunctive. 936 *sine conciliatu*. *nisi conciliatum* Goebel. 938 *ipsam* Flor. 31 Camb. Pont. Mar. Ald. 1 Junt. for *lesam*. 940 *terraque creatis*. Wak. has properly retained this reading of all mss. *flammaque creatis* Mar. Ald. 1 Junt. vulg. before Wak. *aethraque creatis* Lach.: but I do not know what *aethra creata* are, unless they be the same as *terra creata*, the various products of the earth. 941 *convenienti* Lamb. for *convenientes* which Lach. retains: the termination of 942 has caused the mistake. 943 *animante in quaque cientur* Hugo Purmann in Jahn's Jahrb. f. Philol. 67 p. 673 for *animantem quamque tuentur*. *animantum concuterentur* Lach. 942 Bern. reads *omnicientes* and 943 keeps the ms. reading: *tuentur* is quite foreign to the sense of the passage; else Lucr. would not avoid using *omnituentes* and *tuentur* together. 951 *caulas* B corr. Flor. 31 for

et quasi iam leti dominantem in corpore motum
discutere ac paene amissos accendere sensus.
nam qua re potius leti iam limine ab ipso
ad vitam possit conlecta mente reverti,
quam quo decursum prope iam siet ire et abire?
  Praeterea quoniam dolor est ubi materiai
corpora vi quadam per viscera viva per artus
sollicitata suis trepidant in sedibus intus,
inque locum quando remigrant, fit blanda voluptas,
scire licet nullo primordia posse dolore
temptari nullamque voluptatem capere ex se;
quandoquidem non sunt ex ullis principiorum
corporibus, quorum motus novitate laborent
aut aliquem fructum capiant dulcedinis almae,
haut igitur debent esse ullo praedita sensu.
  Denique uti possint sentire animalia quaeque,
principiis si iam est sensus tribuendus eorum,
quid, genus humanum propritim de quibu' factumst?
scilicet et risu tremulo concussa cachinnant
et lacrimis spargunt rorantibus ora genasque
multaque de rerum mixtura dicere callent
et sibi proporro quae sint primordia quaerunt;
quandoquidem totis mortalibus adsimulata

cavias. eiecit. eicit Nicc. Flor. 31 Camb. 954 *oblato* old eds. for *oblata.*
961 *conlecta* Lamb. first for *coniecta* which Wak. absurdly retains. *possit* Lach. for *possint*: as the verb cannot refer to *sensus* or anything but *quamvis animantem* in 944. 963 *Praeterea. propterea* Lach. perversely: see notes 2: a new paragraph begins here. 975 *de quibu' factumst* Lamb. for *de quibus auctumst*, and 986 *non ex ridentibu' factus* for *non ex ridentibus auctus.* Nonius p. 511 has *de quibus actus.* Lamb. ed. 3 adds most truly 'Primum Latine dici non potest *auctus de re* aut *ex re aliqua*, sed *auctus re aliqua* [speaking of course of the atoms of which a thing is made: v 322 *quodcumque alias ex se res auget alitque*, and the like have nothing to do with the question]. nam *auctus* casum septimum sine praepositione postulat. deinde aliud est *auctus re aliqua*, aliud *factus de re* aut *ex re aliqua.* hoc qui nescit, fateatur se hospitem esse in lingua Latina': this he doubtless intended for Gifanius. Wak. more fearless than the angels keeps of course *auctum* and thus comments, 'editores *aptum* [most *factum*] ausi scilicet, libris omnibus religionem invocantibus contra profanos emendatores, dictionem Lucretio lubentissime frequentatam contextu emovere, et fetus proprios per audaciam odiosissimam atque perditissimam infercire. *ὡς ἀργαλέον πρᾶγμ' ἐστίν, ὦ Ζεῦ καὶ θεοί*'. Truly *delira haec furiosaque cernimus esse Et ridere potest non ex ridentibu' factus.* 976 AB have here *cacinnant*: and so perhaps Lucr.

ipsa quoque ex aliis debent constare elementis,
inde alia ex aliis, nusquam consistere ut ausis:
quippe sequar, quodcumque loqui ridereque dices
et sapere, ex aliis eadem haec facientibus ut sit.
quod si delira haec furiosaque cernimus esse
et ridere potest non ex ridentibu' factus
et sapere et doctis rationem reddere dictis
non ex seminibus sapientibus atque disertis,
qui minus esse queant ea quae sentire videmus
seminibus permixta carentibus undique sensu?
  Denique caelesti sumus omnes semine oriundi;
omnibus ille idem pater est, unde alma liquentis
umoris guttas mater cum terra recepit,
feta parit nitidas fruges arbustaque laeta
et genus humanum, parit omnia saecla ferarum,
pabula cum praebet quibus omnes corpora pascunt
et dulcem ducunt vitam prolemque propagant;
quapropter merito maternum nomen adepta est.
cedit item retro, de terra quod fuit ante,
in terras, et quod missumst ex aetheris oris,
id rursum caeli rellatum templa receptant.
nec sic interemit mors res ut materiai
corpora conficiat, sed coetum dissupat ollis,
inde aliis aliud coniungit; et effit ut omnes
res ita convertant formas mutentque colores
et capiant sensus et puncto tempore reddant;
ut noscas referre eadem primordia rerum
cum quibus et quali positura contineantur
et quos inter se dent motus accipiantque,
neve putes aeterna penes residere potesse

wrote; but elsewhere they insert the *h.* 982 *alia* Ver. Ven. for *ali.*
985 *delira* Flor. 31 Camb. Brix. Mar. for *det ira.* 998 *adepta* B corr. Flor. 31 Camb. for *adempta.* 1000 *missumst* Lactantius, *missum est* Camb. etc. for *missus.* 1001 *rellatum. fulgentia* Lactant. inst. VII 12. 1002 *mors res, ut* Mar. Ald. 1 Junt. for *mors ut res.* 1004 *coniungit; et effit ut* Ed. for *coniungit et efficit. coniungitur et fit* Lach. who has a full stop at *ollis.* Mar. Ald. 1 Junt. vulg. have *ut* for *ita* in 1005: as no editor before Wak. would tolerate the omission of *ut.* 1007 *eadem* Avanc. for *earum.* 1010—1012 Lach. and Bern. with all previous editors have quite misunderstood this passage in which not a letter is to be changed: they take *quod* to be the conjunction; it is really the

corpora prima quod in summis fluitare videmus
rebus et interdum nasci subitoque perire.
quin etiam refert nostris in versibus ipsis
cum quibus et quali sint ordine quaeque locata.
si non omnia sunt, at multo maxima pars est
consimilis; verum positura discrepitant res.
sic ipsis in rebus item iam materiai
concursus motus ordo positura figurae
cum permutantur, mutari res quoque debent.
  Nunc animum nobis adhibe veram ad rationem.
nam tibi vementer nova res molitur ad auris
accedere et nova se species ostendere rerum.
sed neque tam facilis res ulla est quin ea primum
difficilis magis ad credendum constet, itemque
nil adeo magnum neque tam mirabile quicquam,
quod non paulatim minuant mirarier omnes.
suspicito caeli clarum purumque colorem,

relative: Lach. for *summis* unskilfully reads *cunctis*, and supposes 1013 to commence a new paragraph wholly unconnected with what precedes: he encloses in [ ] 1013—1104. The truth is 1013—1022 are closely united with what precedes if rightly understood. Mar. Junt. Lamb. ed. 1, vulg. have *parum* for *penes* in 1010. Lamb. ed. 3 has a long note shewing that his conception of the passage is no less confused than Lachmann's: the small word *quod* has given rise to these strange misapprehensions. 1015 1016 = I 820 821 with the exception of *Significant* for *Constituunt*: 1020 = 726 and V 438: Lach. has rightly seen that they are here quite out of place: in the first book they are properly said of the atoms, but here they interrupt the sense: 1020 the interpolator has transferred hither without taking the trouble of changing *vias* and *plagas* to *viae* and *plagae*, which was first done by Pont. and Mar. 1017 *sunt* Lach. for *sint*: he compares 458.

1023 *adhibe veram* B corr. Ver. Ven. Mar. for *adhibueram*. 1024 *vementer* Avanc. and Lach. rightly for *vehementes*: so *vemens* which occurs several times: in fact those were the only forms known to Lucr. and all writers of the best ages: see Lach. 1025 *Accĕdere* all mss. and old eds.: this old form I have retained here and V 609 where A has *Accedere*, Nicc. *Accendere*: see Vahlen's Varron. sat. Menipp. p. 95, and his Ennian. trag. rel. 114 and 281, where the best mss. of Ennius and Varro retain the same form *accĕdo*: it appears from Ribbeck that the mss. of Virgil preserve in many similar words *e* for *i*, but his judgment in adopting them seems often at fault: ap. Ribbeck trag. Lat. p. IX Fleckeisen gives examples from Plautus; Livy XXI 10 12 mss. have *accedere*: III 239 I retain *recĕpit* of mss. *peremo interemo neglego intellego* were the only forms admitted in the best ages, as the concurrent testimony of all good mss. proves. 1029 *minuant mirarier*. *mittant mirarier* Lach. which I adopted in the small ed. 1030 *Suspicito* Bern. for *Principio*. *Percipito* Lach, which can hardly be right: indeed *Principio* is so appropriate that I incline to think a verse is lost, such as this *Cuius, uti memoro, permulta exempla*

quaeque in se cohibet, palantia sidera passim,
lunamque et solis praeclara luce nitorem;
omnia quae nunc si primum mortalibus essent,
ex inproviso si nunc obiecta repente,
quid magis his rebus poterat mirabile dici
aut minus ante quod auderent fore credere gentes?
nil, ut opinor: ita haec species miranda fuisset.
quam tibi iam nemo, fessus satiate videndi,
suspicere in caeli dignatur lucida templa!
desine quapropter novitate exterritus ipsa
expuere ex animo rationem, sed magis acri
iudicio perpende et, si tibi vera videntur,
dede manus, aut, si falsum est, accingere contra.
quaerit enim rationem animus, cum summa loci sit
infinita foris haec extra moenia mundi,
quid sit ibi porro quo prospicere usque velit mens
atque animi iactus liber quo pervolet ipse.
  Principio nobis in cunctas undique partis
et latere ex utroque *supra* supterque per omne
nulla est finis; uti docui, res ipsaque per se
vociferatur, et elucet natura profundi.
nullo iam pacto veri simile esse putandumst,
undique cum vorsum spatium vacet infinitum
seminaque innumero numero summaque profunda
multimodis volitent aeterno percita motu,
hunc unum terrarum orbem caelumque creatum,
nil agere illa foris tot corpora materiai;
cum praesertim hic sit natura factus, ut ipsa
sponte sua forte offensando semina rerum,
multimodis temere incassum frustraque coacta,

videmus: *Principio*, 'chief of all'. Lamb. has *Principio quod non m. m. o. Paulatim, caeli* cet. on no authority, though he appeals to 'veteres libri'. 1031 *cohibet* Lach. for *cohibent*: he justly wonders no one before him saw this. *quemque ...cohibent* previous editors. 1033 *essent*. *extent* Orelli Lach. *adsint* Pont. Junt. Lamb. etc.: the imperfect seems necessary; I therefore in 1034 read *si nunc* for *si sint*: the *si* was written twice; hence the error. *essent...Ex inproviso visu subiecta* Bern. 1047 *iactus* Gronov. Bentl. for *tactus*. *iniectus* Mar. Junt. which gives the right sense. *libero quo pervolet ipse* B, *volet* A. *liber quo pervolet ire* Lamb. 1049 *supra supterque* Lach. rightly for *superque*. *superque infraque* Politian in marg. Flor. 29, *infraque superque* Mar. *subterque* Pont. *infra supraque* Ald. 1 Junt. Lamb. vulg. 1058 *ut* Ed. for *et*: Lach. inserts *ut* before *semina* in

tandem colarunt ea quae coniecta, repente
magnarum rerum fierent exordia semper,
terrai maris et caeli generisque animantum.
quare etiam atque etiam talis fateare necesse est
esse alios alibi congressus materiai,
qualis hic est, avido complexu quem tenet aether.
  Praeterea cum materies est multa parata,
cum locus est praesto nec res nec causa moratur
ulla, geri debent nimirum et confieri res.
nunc et seminibus si tanta est copia quantam
enumerare aetas animantum non queat omnis,
visque eadem *et* natura manet quae semina rerum
conicere in loca quaeque queat simili ratione
atque huc sunt coniecta, necesse est confiteare
esse alios aliis terrarum in partibus orbis
et varias hominum gentis et saecla ferarum.
  Huc accedit ut in summa res nulla sit una,
unica quae gignatur et unica solaque crescat,
quin aliquoiu' siet saecli permultaque eodem
sint genere. in primis animalibus, inclute Memmi,
invenies sic montivagum genus esse ferarum,
sic hominum genitam prolem, sic denique mutas
squamigerum pecudes et corpora cuncta volantum.
quapropter caelum simili ratione fatendumst
terramque et solem lunam mare, cetera quae sunt,

1059. 1061 *colarunt* Nicc. 3 Vat. Mon. Junt. rightly: see notes 2. *colerunt* AB. *cooluerint* Lamb. *coluerunt* Lach. *coierunt* B corr. Flor. 31 Camb. one Vat. *coniecta* of all mss. seems to me quite right: comp. 1108. *convecta* Lach. which appears to be the right reading in the nearly identical passage v 429 where the mss. have *conventa*. Lach. objects to *coniecta* 'quasi Lucretius hic aliter quam in quinto dicere potuerit': but there he has also *conveniant*, here *colarunt*, there *saepe*, here *semper*; for Lach. vainly alters *saepe* to *semper*: he also says of *coniecta* 'sententiam non explet nisi addita loci significatione, ut paulo post *Conicere in loca quaeque*' cet.: but I 284 *Fragmina coniciens silvarum arbustaque tota*, we find it used absolutely. 1062 *exordia* Mar. Ald. 1 Junt. for *ex ordine*, as in the 5th book. 1070 *et*. *ex* Lach. but *et* is clearly right: *ex* makes the construction most awkward: then 1072 *Visque eadem et natura* Mar. Ald. 1 Junt. for *Vis eadem natura*. *Quis eadem natura* Lach. 1073 *quaeque queat simili* Flor. 31 Camb. for *quaeque atsimili*. 1079 *aliquoiu' siet* Gronov. for *aliquoiuis siet* B, *alioquoiuis* A: the older editors have gone widely astray. 1080 *inclute Memmi* Gronov. for *indice mente*. 1081 *Invenies* Pont. Mar. Ald. 1 Junt. for *Invenisse*. 1082 *genitam* Mar. Ald. 1 Junt. for *geminam*. 1089 *quod his*

non esse unica, sed numero magis innumerali;
quandoquidem vitae depactus terminus alte
tam manet haec et tam nativo corpore constant,
quam genus omne quod hic generatim*st* rebus abundans.
  Quae bene cognita si teneas, natura videtur
libera continuo dominis privata superbis
ipsa sua per se sponte omnia dis agere expers.
nam pro sancta deum tranquilla pectora pace
quae placidum degunt aevom vitamque serenam,
quis regere immensi summam, quis habere profundi
indu manu validas potis est moderanter habenas,
quis pariter caelos omnis convertere et omnis
ignibus aetheriis terras suffire feracis,
omnibus inve locis esse omni tempore praesto,
nubibus ut tenebras faciat caelique serena
concutiat sonitu, tum fulmina mittat et aedis
saepe suas disturbet et *in* deserta recedens
saeviat exercens telum quod saepe nocentes
praeterit exanimatque indignos inque merentes?
  Multaque post mundi tempus genitale diemque
primigenum maris et terrae solisque coortum
addita corpora sunt extrinsecus, addita circum
semina quae magnum iaculando contulit omne;
unde mare et terrae possent augescere et unde
appareret spatium caeli domus altaque tecta
tolleret a terris procul et consurgeret aer.
nam sua cuique locis ex omnibus omnia plagis
corpora distribuuntur et ad sua saecla recedunt.
umor ad umorem, terreno corpore terra
crescit et ignem ignes procudunt aetheraque *aether*,
donique ad extremam crescendi perfica finem

generatim rebus abundans mss. *est* Lach. for *his*. *hic...abundat* Bern. *hic generatimst rebus abundans* Ed. 1094 mss. giving *vltam* for *vitam* have caused Mar. Junt. Wak. etc. to err strangely: simple as it is, Avanc. first saw the truth. *vitam* Pont. before him. 1102 *in* added by Lactant. inst. III 17, Flor. 31 Ver. Ven. Mar. etc. 1110 *Appareret* Nicc. Camb. for *appariret*. Politian in marg. Flor. 29 says 'in vetusto *Appareret*': was this the ms. of Poggio? in 716 to *infra* he has in marg. 'P *inter*', with dots added: is P Poggio? AB there have *inte*. 1115 *aether* added by Flor. 31 Camb. Mar. *aëraque aër* Lach.: but see notes 2.
1116 *extremam...finem* Lach. rightly for *extremum...finem*, as this is the only place

omnia perduxit rerum natura creatrix;
ut fit ubi nilo iam plus est quod datur intra
vitalis venas quam quod fluit adque recedit.
omnibus hic aetas debet consistere rebus,
hic natura suis refrenat viribus auctum.
nam quaecumque vides hilaro grandescere adauctu
paulatimque gradus aetatis scandere adultae,
plura sibi adsumunt quam de se corpora mittunt,
dum facile in venas cibus omnis inditur et dum
non ita sunt late dispessa ut multa remittant
et plus dispendi faciant quam vescitur aetas.
nam certe fluere adque recedere corpora rebus
multa manus dandum est; sed plura accedere debent,
donec alescendi summum tetigere cacumen.
inde minutatim vires et robur adultum
frangit et in partem peiorem liquitur aetas.
quippe etenim quanto est res amplior, augmine adempto,
et quo latior est, in cunctas undique partis
plura modo dispargit et ab se corpora mittit,
nec facile in venas cibus omnis diditur ei
nec satis est, proquam largos exaestuat aestus,
unde queat tantum suboriri ac subpeditare.
1146 omnia debet enim cibus integrare novando
et fulcire cibus, *cibus* omnia sustentare,
nequiquam, quoniam nec venae perpetiuntur
quod satis est neque quantum opus est natura ministrat.
1139 iure igitur pereunt, cum rarefacta fluendo

where the mss. make *finis* masc. *perfica* AB Nonius. *perfice* A corr. Nicc.
1120 *hic* Ed. for *his*, as in 1089. *his rebus* here has no more sense than there. 1122 *hilar...adauctu* AB. *hilari* Avanc. *hilaro* more rightly Lamb.
1124 *corpora* Nicc. B corr. for *cora*. 1126 *dispessa* Ed. for *dispersa*: comp. III 988 *dispessis membris*: *dispersa* has here no sense: a full-grown man is more *dispessus*, but not more *dispersus* than a child: *dispessa* is the same as the *res amplior et latior* of 1133. 1129 *debent* Flor. 31 Camb. for *debet*. 1131 *robur*. *robor* AB, perhaps rightly; but Quintilian says that 'summi auctores' write *robur*, *ebur*. 1135 *ab se* Lach. for *a se*, Lucr. as a rule using *ab* before *s*: but I have my doubts here: see Lach. to VI 925: Lucr. may have varied his usage.
1136 *diditur* Mar. Ald. Junt. for *deditur*. 1138 *queat* Mar. Junt. for *queant*.
1139—1142 (1146—1149): Goebel quaest. Lucr. crit. p. 33 has first seen that these verses are to come after 1138: the thing admits of no question; though it has escaped all the editors and Lach. 1140 *cibus* added by Is. Vossius in ms.

sunt et cum externis succumbunt omnia plagis,
quandoquidem grandi cibus aevo denique defit
nec tuditantia rem cessant extrinsecus ullam
corpora conficere et plagis infesta domare.
sic igitur magni quoque circum moenia mundi
1145 expugnata dabunt labem putris*que* ruinas.
iamque adeo fracta est aetas effetaque tellus
vix animalia parva creat quae cuncta creavit
saecla deditque ferarum ingentia corpora partu.
haud, ut opinor, enim mortalia saecla superne
aurea de caelo demisit funis in arva
nec mare nec fluctus plangentis saxa crearunt,
sed genuit tellus eadem quae nunc alit ex se.
praeterea nitidas fruges vinetaque laeta
sponte sua primum mortalibus ipsa creavit,
ipsa dedit dulcis fetus et pabula laeta;
quae nunc vix nostro grandescunt aucta labore,
conterimusque boves et viris agricolarum,
conficimus ferrum vix arvis suppeditati:
usque adeo parcunt fetus augentque labore.
iamque caput quassans grandis suspirat arator
crebrius, incassum manuum cecidisse labores,
et cum tempora temporibus praesentia confert
praeteritis, laudat fortunas saepe parentis
1170 et crepat, anticum genus ut pietate repletum
perfacile angustis tolerarit finibus aevom,
cum minor esset agri multo modus ante viritim.
1168 tristis item vetulae vitis sator atque *vietae*

notes: Faber omits the verse: Voss. inserts 'et fulcire cibus, cibus omnia sustentare'; and adds in marg. 'sic Ms. v.' 1149 *que* added by Nicc.
1150 *fracta* B corr. for *facta*. *aetas*. Heins. proposes in ms. notes *aetate*. *effeta* Nicc. for *effecta*. 1153 *opinor enim mortalia* Mar. Junt. for *opinore immortalia*. 1165 *manuum* Is. Voss. in ms. notes for *magnum*. 1166 Mon. and Junt. read *Et cum temporibus praesentia tempora*, and so Politian in marg. Flor. 29: it is to be noticed that here too Naugerius, as in I 15 and 16, does not follow Junt. but recurs to the true order of the words. 1168—1170 (1170—1172) Theod. Bergk in Jahn's Jahrb. vol. 67 p. 319 has rightly transferred to this place. 1171 mss. have at the end *fatigat*, taken from 1172 by a common blunder, for which Heins. in ms. notes reads *vietae*, comparing III 385 *viĕtam*: he suggests too *viĕtae* for *vetulae*, after Hor. epod. XII 7, and *senectae* for *fatigat*, used

temporis incusat momen caelumque fatigat
1173 nec tenet omnia paulatim tabescere et ire
ad capulum spatio aetatis defessa vetusto.

as in III 772. 1172 *momen* Pius in notes for *nomen*. *caelum* Wak. for *saeclum*. Pius, having of course *fatigat* in 1171, suggests ingeniously *saeclumque fatiscens*. Nicc. all Flor. Vat. Camb. old eds. omit this verse: I don't know whence Avanc. got it: Pius of course had it from him. 1174 '*Ad scopulum*. sic oblongus: quadratus *Ad copulum*, sed *s* littera ab ipso librario addita. de his Havercampus falsa refert: sed idem verissime et praeter morem suum ingeniose scribit *ire Ad capulum*' Lach.: Wak. also says of it, 'quae est Havercampi ingeniosissima ac dignissima pretii quantivis emendatio': but alas it is not Havercamp's, as may be seen from his own crit. note: it is due to Is. Vossius, who says in ms. notes 'ms. ut hic, al. ms. *scopulum*' and again '*copulum* v. lege *capulum* i.e. sepulturam': the two mss. are AB, then in his own library: Nicc. reads *scopulum* with A.

T. LUCRETI CARI

DE RERUM NATURA

LIBER TERTIUS

E tenebris tantis tam clarum extollere lumen
qui primus potuisti inlustrans commoda vitae,
te sequor, o Graiae gentis decus, inque tuis nunc
ficta pedum pono pressis vestigia signis,
non ita certandi cupidus quam propter amorem
quod te imitari aveo; quid enim contendat hirundo
cycnis, aut quidnam tremulis facere artubus haedi
consimile in cursu possint et fortis equi vis?
tu, pater, es rerum inventor, tu patria nobis
suppeditas praecepta, tuisque ex, inclute, chartis,
floriferis ut apes in saltibus omnia libant,
omnia nos itidem depascimur aurea dicta,
aurea, perpetua semper dignissima vita.
nam simul ac ratio tua coepit vociferari
naturam rerum, divina mente coorta,
diffugiunt animi terrores, moenia mundi
discedunt, totum video per inane geri res.
apparet divum numen sedesque quietae
quas neque concutiunt venti nec nubila nimbis
aspergunt neque nix acri concreta pruina
cana cadens violat semper*que* innubilus aether

1 *E* Mon. Brix. Ver. Ven. for *O* of A Vien. frag. om. B Nicc. *A* Flor. 31 Camb. 11 *libant* Avanc. Nauger. Gif. Lach. for *limant*. 'an magis *libant*' Mar. 15 *coorta* Orelli Lach. for *coortam*. 21 *semperque* Nicc. corr. Flor. 31 Camb. Vat. 1136 and 1954 Othob. Pont. Mar. Junt. Lamb. Lach. for *semper*. *semper sine nubibus* Ald. 1, because Ver., and Ven. on which Ald. 1 is

integit, et large diffuso lumine rident.
omnia suppeditat porro natura neque ulla
res animi pacem delibat tempore in ullo.
at contra nusquam apparent Acherusia templa
nec tellus obstat quin omnia dispiciantur,
sub pedibus quaecumque infra per inane geruntur.
his ibi me rebus quaedam divina voluptas
percipit adque horror, quod sic natura tua vi
tam manifesta patens ex omni parte retecta est.

Et quoniam docui, cunctarum exordia rerum
qualia sint et quam variis distantia formis
sponte sua volitent aeterno percita motu
quove modo possint res ex his quaeque creari,
hasce secundum res animi natura videtur
atque animae claranda meis iam versibus esse
et metus ille foras praeceps Acheruntis agendus,
funditus humanam qui vitam turbat ab imo,
omnia suffundens mortis nigrore neque ullam
esse voluptatem liquidam puramque relinquit.
nam quod saepe homines morbos magis esse timendos
infamemque ferunt vitam quam Tartara leti
et se scire animae naturam sanguinis esse
46 aut etiam venti, si fert ita forte voluntas,
44 nec prosum quicquam nostrae rationis egere,
hinc licet advertas animum magis omnia laudis
47 iactari causa quam quod res ipsa probetur.
extorres idem patria longeque fugati
conspectu ex hominum, foedati crimine turpi,
omnibus aerumnis adfecti denique vivunt,
et quocumque tamen miseri venere parentant
et nigras mactant pecudes et manibu' divis
inferias mittunt multoque in rebus acerbis
acrius advertunt animos ad religionem.
quo magis in dubiis hominem spectare periclis
convenit adversisque in rebus noscere qui sit;
nam verae voces tum demum pectore ab imo

founded, have *in nubibus* with 3 Vat. 22 *rident* Lach. for *ridet*. 28 *ibi* Pont. Gronov. Wak. for *ubi*. *tibi* Mar. Junt. 29 *sic natura* Avanc. for *signatura*. 33 *aeterno* Bentl. for *alterno*. 44 (46) first placed here by

eiciuntur *et* eripitur persona, manet res.
denique avarities et honorum caeca cupido
quae miseros homines cogunt transcendere fines
iuris et interdum socios scelerum atque ministros
noctes atque dies niti praestante labore
ad summas emergere opes, haec vulnera vitae
non minimam partem mortis formidine aluntur.
turpis enim ferme contemptus et acris egestas
semota ab dulci vita stabilique videntur
et quasi iam leti portas cunctarier ante;
unde homines dum se falso terrore coacti
effugisse volunt longe longeque remosse,
sanguine civili rem conflant divitiasque
conduplicant avidi, caedem caede accumulantes;
crudeles gaudent in tristi funere fratris
et consanguineum mensas odere timentque.
consimili ratione ab eodem saepe timore
macerat invidia. ante oculos illum esse potentem,
illum aspectari, claro qui incedit honore,
ipsi se in tenebris volvi caenoque queruntur.
intereunt partim statu*arum* et nominis ergo.
et saepe usque adeo, mortis formidine, vitae
percipit humanos odium lucisque videndae,

Bentl. 58 *eiciuntur* Lamb. ed. 2 and 3, Gif. Lach. for *eliciuntur*: the two words being perpetually confounded, though *eliciuntur* is perhaps defensible here. Lach. is wrong however in saying that Lamb. 'tandem veritati concedens' adopted *eiciuntur* from Gif. without acknowledgment: in his first ed. he keeps *eliciuntur* in the text, but has the same note as in ed. 3: 'existimant quidam legendum *eiiciuntur*...et ita amicus meus putat legendum in oratione pro M. Caelio, *nonne ipsam domum metuet, nequam vocem eiiciat?* ubi vulgo legitur *eliciat*: cui propemodum nunc assentior, quamvis olim dissenserim' cet. Lamb. angry though he was, was too true a scholar to treat Gif. as Gif. treated him. Nor does what he here says of his friend Muretus call for the petty malignity with which the latter in his var. lect. II 17 speaks of him after his death. *manet res* Flor. 31 Camb. Pont. Mar. for *manare*. 65 *ferme*. *famae* Mar. Ald. 1 Junt. from *formae* of Brix. Ver. Ven. *fama et* Lamb. 66 *videntur* Lamb. for *videtur*, as *semota* is neut. plur. according to the usage of Lucr.: but it is with much doubt and hesitation and in deference only to two such scholars as Lamb. and Lach. that I refuse to allow to Lucr. the liberty which the purest writers seem to have claimed, of making the partic. and verb refer only to the last of two or more nominatives. 72 *fratris* Macrob. sat. VI 2 15, Junt. not Mar. for *fratres*. 78 *statuarum* Flor. 31 Camb. corr. Vat. 1954 Othob. Mar. Junt. for

ut sibi consciscant maerenti pectore letum
obliti fontem curarum hunc esse timorem,

. . . .

hunc vexare pudorem, hunc vincula amicitiai
rumpere et in summa pietatem evertere suadet;
nam iam saepe homines patriam carosque parentis
prodiderunt, vitare Acherusia templa petentes.
nam veluti pueri trepidant atque omnia caecis
in tenebris metuunt, sic nos in luce timemus
interdum, nilo quae sunt metuenda magis quam
quae pueri in tenebris pavitant finguntque futura.
hunc igitur terrorem animi tenebrasque necessest
non radii solis neque lucida tela diei
discutiant, sed naturae species ratioque.
  Primum animum dico, mentem quam saepe vocamus,
in quo consilium vitae regimenque locatum est,
esse hominis partem nilo minus ac manus et pes
atque oculei partes animantis totius extant.

. . . .

sensum animi certa non esse in parte locatum,
verum habitum quendam vitalem corporis esse,
harmoniam Grai quam dicunt, quod faciat nos
vivere cum sensu, nulla cum in parte siet mens;
ut bona saepe valetudo cum dicitur esse
corporis, et non est tamen haec pars ulla valentis.
sic animi sensum non certa parte reponunt;

statum. 81 *consciscant* Nicc. for *coniciscant.* 82 I assume a v. to be lost here, such as *Qui miseros homines cogens scelus omne patrare*: see notes 2.

84 *suadet. fundo* Lamb. *fraude* Lach. *clade* Bern. 94 *quam* Charisius p. 187 (210) for *quem*: so Mon. Junt. Lamb. Lach. 'hoc ipsum dedit, ante quam Charisii liber innotuisset, Marullus; quod miror, cum ille tam subtiliter iudicare non soleat' says Lach.: but Marullus found it in his ms. out of which Candidus also got it. 95 *locatum* Mar. Ald. 1 Junt. for *vocatum.* 988 before this verse one or more have been lost: Ald. 1 thus supplies it, *Quamvis multa quidem sapientum turba putaret*: Mar. Junt. and eds. in general before Lach. give the same, but for *putaret* more correctly *putarunt*: Gif. has *putarit*, and this note, 'Ita v. q. l. [vetus quidam liber]. in al. *putaret.* al. *putarũt.*' It is not improbable the v. q. l. is the Ven. with Marullus' ms. notes: it is very possible too that *putaret* in Ald. 1 is a misprint for *putarit*: see what I say above p. 10 on the heavy charge brought against Avancius by Lach. here. [As Marullus therefore in cod. Victor. writes *putarunt*, *putarit* was probably an earlier suggestion: see n. to II 529: other instances will be noticed below.] 100 *faciat*

magno opere in quo mi diversi errare videntur.
saepe itaque, in promptu corpus quod cernitur, aegret,
cum tamen ex alia laetamur parte latenti;
et retro fit uti contra sit saepe vicissim,
cum miser ex animo laetatur corpore toto;
non alio pacto quam si, pes cum dolet aegri,
in nullo caput interea sit forte dolore.
praeterea molli cum somno dedita membra
effusumque iacet sine sensu corpus honustum,
est aliud tamen in nobis quod tempore in illo
multimodis agitatur et omnis accipit in se
laetitiae motus et curas cordis inanis.
nunc animam quoque ut in membris cognoscere possis
esse neque harmonia corpus sentire solere,
principio fit uti detracto corpore multo
saepe tamen nobis in membris vita moretur;
atque eadem rursum, cum corpora pauca caloris
diffugere forasque per os est editus aer,
deserit extemplo venas atque ossa relinquit;
noscere ut hinc possis non aequas omnia partis
corpora habere neque ex aequo fulcire salutem,
sed magis haec, venti quae sunt calidique vaporis
semina, curare in membris ut vita moretur.
est igitur calor ac ventus vitalis in ipso
corpore qui nobis moribundos deserit artus.
quapropter quoniam est animi natura reperta
atque animae quasi pars hominis, redde harmoniai
nomen, ad organicos alto delatum Heliconi;
sive aliunde ipsi porro traxere et in illam
transtulerunt, proprio quae tum res nomine egebat.

Nicc. B corr. for *taciat.* 106 *aegret* Lach. from 'grammaticus Vindobonensis Eichenfeldii' who quotes the verse on account of the word *aegret.* *aegrum* mss. *aegrit* Lamb. ed. 3. 108 *fit uti* Lamb. for *fit ubi.* 'Itali *fit uti*' says Lach. What Itali? not Nicc. nor Flor. 31 Camb. Ver. Ven. Pont. Mar. Ald. 1 Pius Junt. Ald. 2: all of which I have now before me except Nicc. and Flor. 31, and of these two I have a collation of my own. 118 *corpus senteire* Lach. from a conj. of Wak. for *corpus interire.* *harmoniam corpus retinere* Mar. Ald. 1 Junt. 132 is first rightly given by Is. Voss. in ms. notes, by simply reading *alto* for *altu* of AB. A corr. Nicc. and all late mss. read *ab organico* and *salto* or *saltu* or *sacro*: hence endless confusion. *ab organico saltu...Heliconis* is

quidquid *id* est, habeant: tu cetera percipe dicta.
Nunc animum atque animam dico coniuncta teneri
inter se atque unam naturam conficere ex se,
sed caput esse quasi et dominari in corpore toto
consilium quod nos animum mentemque vocamus.
idque situm media regione in pectoris haeret.
hic exultat enim pavor ac metus, haec loca circum
laetitiae mulcent; hic ergo mens animusquest.
cetera pars animae per totum dissita corpus
paret et ad numen mentis momenque movetur.
idque sibi solum per se sapit, *id* sibi gaudet,
cum neque res animam neque corpus commovet una.
et quasi, cum caput aut oculus temptante dolore
laeditur in nobis, non omni concruciamur
corpore, sic animus nonnumquam laeditur ipse
laetitiaque viget, cum cetera pars animai
per membra atque artus nulla novitate cietur.
verum ubi vementi magis est commota metu mens,
consentire animam totam per membra videmus
sudoresque ita palloremque existere toto
corpore et infringi linguam vocemque aboriri,
caligare oculos, sonere auris, succidere artus,
denique concidere ex animi terrore videmus
saepe homines; facile ut quivis hinc noscere possit
esse animam cum animo coniunctam, quae cum animi *vi*
percussast, exim corpus propellit et icit.
Haec eadem ratio naturam animi atque animai
corpoream docet esse; ubi enim propellere membra,
corripere ex somno corpus mutareque vultum
atque hominem totum regere ac versare videtur,
quorum nil fieri sine tactu posse videmus
nec tactum porro sine corpore, nonne fatendumst
corporea natura animum constare animamque?
praeterea pariter fungi cum corpore et una
consentire animum nobis in corpore cernis.

the old vulgate. 135 *id* added by Flor. 31 Camb. 145 *sapit, id sibi* Wak. for *sapit sibi*. *sapit et sibi* Nicc. vulg. 154 *ita palloremque* Nicc. Mar. etc. for *itaque pallorem*. *itaque et pallorem* Lamb. etc. 159 *animi vi* Ven. Mar. first for *animi*: Lach. is wrong: Flor. 31 reads *animai*. Ver. om. *vi*

si minus offendit vitam vis horrida teli
ossibus ac nervis disclusis intus adacta,
at tamen insequitur languor terraeque petitus
segnis, et in terra mentis qui gignitur aestus,
interdumque quasi exurgendi incerta voluntas.
ergo corpoream naturam animi esse necessest,
corporeis quoniam telis ictuque laborat.
Is tibi nunc animus quali sit corpore et unde
constiterit pergam rationem reddere dictis.
principio esse aio persuptilem atque minutis
perquam corporibus factum constare. id ita esse
hinc licet advertas animum ut pernoscere possis:
nil adeo fieri celeri ratione videtur,
quam *sibi* mens fieri proponit et inchoat ipsa;
ocius ergo animus quam res se perciet ulla,
ante oculos quorum in promptu natura videtur.
at quod mobile tanto operest, constare rutundis
perquam seminibus debet perquamque minutis,
momine uti parvo possint inpulsa moveri.
namque movetur aqua et tantillo momine flutat
quippe volubilibus parvisque creata figuris,
at contra mellis constantior est natura
et pigri latices magis et cunctantior actus;
haeret enim inter se magis omnis materiai
copia, nimirum quia non tam levibus extat
corporibus neque tam suptilibus atque rutundis.
namque papaveris aura potest suspensa levisque
cogere ut ab summo tibi diffluat altus acervus;
at contra lapidum conlectum ipse euru' mover*e*

with AB Nicc. *animi vis* Nonius Brix. 170 *offendit* B corr. for *offendis*. *teli* Mar. Junt. most truly for *leti*. 172 *terraeque petitus Segnis* Ed. for *t. p. Suavis*, because I can think of nothing better: *suavis* manifestly has no sense. *Suppus* Lach.: but why *suppus* rather than *pronus*? a man is generally wounded in front and then, as Lucr. says IV 1049, he falls forwards not backwards. *Saevus et* Bern. after a friend of Wak. Mr John Jones: but the copula *et* is never found in Lucr. out of its place, and a single example must not be introduced by conjecture. 183 *sibi* Wak. for *si*: V 1142 B has *si* for *sibi*. 198 *spicarumque* mss. Bern. has seen that in the letters MQUE the verb MOUERE lurks: in 236 mss. *multamqueri* for *multa moveri*: he reads *cauru' movere*: but whence comes the *spi*? I have therefore written *ipse euru' movere*. *spiritus acer* Lach.: but the sentence requires a verb. *spiclorum* and the like of

noenu potest. igitur parvissima corpora proquam
et levissima sunt, ita mobilitate fruuntur;
at contra quaecumque magis cum pondere magno
asperaque inveniuntur, eo stabilita magis sunt.
nunc igitur quoniam *est* animi natura reperta
mobilis egregie, perquam constare necessest
corporibus parvis et levibus atque rutundis.
quae tibi cognita res in multis, o bone, rebus
utilis invenietur et opportuna cluebit.
haec quoque res etiam naturam dedicat eius,
quam tenui constet textura quamque loco se
contineat parvo, si possit conglomerari,
quod simul atque hominem leti secura quies est
indepta atque animi natura animaeque recessit,
nil ibi libatum de toto corpore cernas
ad speciem, nil ad pondus: mors omnia praestat
vitalem praeter sensum calidumque vaporem.
ergo animam totam perparvis esse necessest
seminibus, nexam per venas viscera nervos;
quatenus, omnis ubi e toto iam corpore cessit,
extima membrorum circumcaesura tamen se
incolumem praestat nec defit ponderis hilum.
quod genus est Bacchi cum flos evanuit aut cum
spiritus unguenti suavis diffugit in auras
aut aliquo cum iam sucus de corpore cessit;
nil oculis tamen esse minor res ipsa videtur
propterea neque detractum de pondere quicquam,
nimirum quia multa minutaque semina sucos
efficiunt et odorem in toto corpore rerum.
quare etiam atque etiam mentis naturam animaeque
scire licet perquam pauxillis esse creatam
seminibus, quoniam fugiens nil ponderis aufert.
 Nec tamen haec simplex nobis natura putanda est.
tenvis enim quaedam moribundos deserit aura

older editors are absurd. *conlectum* Muretus for *coniectum* which Lamb. approves of in his notes and Lach. rightly adopts. 203 *est* added after *quoniam* by Pont. Mar. Ald. 1 Junt. It is added at the end of the verse by Flor. 31 Camb. 210 *si* for *se* Nicc. Mon. Ver. Ven. not Flor. 31 or Camb. 224 *Nil oculis.* 'leg. *nilo*' Heins. in ms. notes. 227 *rerum.* *rei* Lach., I now think

mixta vapore, vapor porro trahit aera secum.
nec calor est quisquam, cui non sit mixtus et aer;
rara quod eius enim constat natura, necessest
aeris inter eum primordia multa moveri.
iam triplex animi est igitur natura reperta;
nec tamen haec sat sunt ad sensum cuncta creandum,
nil horum quoniam recepit res posse creare
sensiferos motus *et homo*, quae mente volutat.
quarta quoque his igitur quaedam natura necessest
adtribuatur; east omnino nominis expers;
qua neque mobilius quicquam neque tenvius exstat,
nec magis e parvis et levibus est elementis;
sensiferos motus quae didit prima per artus.
prima cietur enim, parvis perfecta figuris;
inde calor motus et venti caeca potestas
accipit, inde aer; inde omnia mobilitantur,
concutitur sanguis, tum viscera persentiscunt
omnia, postremis datur ossibus atque medullis
sive voluptas est sive est contrarius ardor.
nec temere huc dolor usque potest penetrare neque acre
permanare malum, quin omnia perturbentur

without reason. 232 *Tenuis* A corr. for *Tenus.* 234 *cui non sit mixtus et aer.* *cui mixtus non siet aer* Lach. who will not tolerate *et* for *etiam.*

236 *multa moveri* A corr. Nicc. and all before Lamb. for *multamqueri*: comp. 198. *multa cieri* Lamb. wrongly after Turnebus. 239 240 a most doubtful passage: 239 *res* Ed. after Bern. for *mens*, 240 it seems to me certain that *quaedam* has come here from the *quaedam* of 241, and as what the poet wrote must be uncertain, I have written *et homo quae* for *quaedam que.* Lach. 239 reads *quem* for *mens*, 240 *quaedam vis menti'*, just retaining the word he ought not and making a most awkward construction. Bern. strangely reads in 240 *quidam quod manticulatur.* Is. Voss. in ms. notes 'legendum videtur *qui dant quae mente volutes*'. 239 I retain *recĕpit* with AB: comp. n. to II 1025 *Accedere*: Virgil's and other old mss. retain many traces of this *e*, intermediate between the *a* of the simple verb and the later *i*. 244 *e parvis et levibus est elementis* Wak. in notes for *e p. et l. ex elem.* and justly: comp. VI 330: in his text he follows Camb. *est p. et l. ex el.* which may be right. *et p. et l. ex e.* Lach. *e parvis aut l. ex el.* Junt. Lamb. not Pont. or Mar. 249 is first rightly given by Pont. and Avanc. in notes at the end of his Catullus: AB have *Concutitur tum sanguis viscera persentisiunt*: Flor. 31 Camb. 3 Vat. give *persentiscunt*: this unrhythmical order of the first words appears in the Junt. and in the text even of Lamb. ed. 1; in ed. 2 and 3 and notes of 1 he reads *Tum quatitur sanguis, tum*: Nicc. misled by *persentisiunt* strangely gave *Concutitur tum sanguis per sentes viscera iunt*; and hence Ver. and Ven. *vint* for *iunt*; out of which Avanc. in Ald. 1 ingeniously devised

usque adeo *ut* vitae desit locus atque animai
diffugiant partes per caulas corporis omnis.
sed plerumque fit in summo quasi corpore finis
motibus: hanc ob rem vitam retinere valemus.
Nunc ea quo pacto inter sese mixta quibusque
compta modis vigeant rationem reddere aventem
abstrahit invitum patrii sermonis egestas;
sed tamen, ut potero, summatim, attingere, tangam.
inter enim cursant primordia principiorum
motibus inter se, nil ut secernier unum
possit nec spatio fieri divisa potestas,
sed quasi multae vis unius corporis extant.
quod genus in quovis animantum viscere volgo
est odor et quidam color et sapor, et tamen ex his
omnibus est unum perfectum corporis augmen.
sic calor atque aer et venti caeca potestas
mixta creant unam naturam et mobilis illa
vis, initum motus ab se quae dividit ollis,
sensifer unde oritur primum per viscera motus.
nam penitus prorsum latet haec natura subestque
nec magis hac infra quicquam est in corpore nostro
atque anima est animae proporro totius ipsa.
quod genus in nostris membris et corpore toto
mixta latens animi vis est animaeque potestas,
corporibus quia de parvis paucisque creatast.
sic tibi nominis haec expers vis facta minutis
corporibus latet atque animae quasi totius ipsa
proporrost anima et dominatur corpore toto.
consimili ratione necessest ventus et aer
et calor inter se vigeant commixta per artus
adque aliis aliud subsit magis emineatque

Concutitur sanguis per venas, viscera vivunt Omnia, but he afterwards learnt better. 254 *ut* added by Lamb.

257 *retinere valemus* A corr. Nicc. all before Lach. most properly for *retinemus valemus*: he reads absurdly *retinemu' valentes*, as if we could not be in life without being in health: the origin of the corruption is obvious. 266 *viscere* B. *visere* A and clearly ms. of Poggio, as Nicc. and all late mss. and early editions so read, even Junt. but not Avanc.: 'alii viscere' Mar.: yet to Wak. *viscere* is 'sordidum et ineptum'! 267 *color* Lamb. conj. rightly for *calor*. *calor* vulgo Lach.

284 *aliis*. *alias* Brieger. 288 *etenim* Faber in emend. and Lach. for *etiam*:

ut quiddam fieri videatur ab omnibus unum,
ni calor ac ventus seorsum seorsumque potestas
aeris interemant sensum diductaque solvant.
est etenim calor ille animo, quem sumit, in ira
cum fervescit et ex oculis micat acribus ardor;
est et frigida multa comes formidinis aura
quae ciet horrorem membris et concitat artus;
est etiam quoque pacati status aeris ille,
pectore tranquillo fit qui voltuque sereno.
sed calidi plus est illis quibus acria corda
iracundaque mens facile effervescit in ira.
quo genere in primis vis est violenta leonum,
pectora qui fremitu rumpunt plerumque gementes
nec capere irarum fluctus in pectore possunt.
at ventosa magis cervorum frigida mens est
et gelidas citius per viscera concitat auras
quae tremulum faciunt membris existere motum.
at natura boum placido magis aere vivit,
nec nimis irai fax umquam subdita percit
fumida, suffundens caecae caliginis umbra,
nec gelidis torpet telis perfixa pavoris:
inter utrosque sitast, cervos saevosque leones.
sic hominum genus est. quamvis doctrina politos
constituat pariter quosdam, tamen illa relinquit
naturae cuiusque animi vestigia prima.
nec radicitus evelli mala posse putandumst,
quin proclivius hic iras decurrat ad acris,
ille metu citius paulo temptetur, at ille
tertius accipiat quaedam clementius aequo.
inque aliis rebus multis differre necessest

a necessary change. Lach. rightly follows Bentl. in joining *in ira* with *Cum fervescit*. 289 *acribus* Lamb. ed. 2 and 3 for *acrius*. 290 *et*. *ea* Lach. intolerant of *et* for *etiam*. 293 *fit qui*. *qui fit* Mar. Ald. 1 Junt. vulgo Lach.: but see notes 2. 298 is placed by Lach. before 296 without cause. 303 *nimis* Flor. 31 Camb. Vat. 1954 Othob. Mar. for *minus*. 304 *Fumida suffundens* Flor. 31 Camb. corr. for *Fumidas effundens*. *umbra* B. *umbram* A Nicc. Camb. which may be right: comp. Plaut. rud. 588 *Quasi vinis Graecis Neptunus nobis suffudit mare*. 305 *pavoris* Mar. Ald. 1 Junt. for *vaporis*. 306 *Inter utrosque sitast* Avanc. (*sita est* Mar. Junt.) for *Inter utrasque sitas*. *sitas* of mss. must be *sitast*: the scribe has then adapted *utrasque* to *sitas*. *Interutraque secus* Lach. *Interutraque secat* Bern. 309 *Naturae* Mar. Junt. for *Natura*. 317 *quot*. *quod*

naturas hominum varias moresque sequacis;
quorum ego nunc nequeo caecas exponere causas
nec reperire figurarum tot nomina quot sunt
principiis, unde haec oritur variantia rerum.
illud in his rebus videor firmare potesse,
usque adeo naturarum vestigia linqui
parvola quae nequeat ratio depellere nobis,
ut nil inpediat dignam dis degere vitam.

Haec igitur natura tenetur corpore ab omni
ipsaque corporis est custos et causa salutis;
nam communibus inter se radicibus haerent
nec sine pernicie divelli posse videntur.
quod genus e thuris glaebis evellere odorem
haud facile est quin intereat natura quoque eius.
sic animi atque animae naturam corpore toto
extrahere haut facile est quin omnia dissoluantur.
inplexis ita principiis ab origine prima
inter se fiunt consorti praedita vita,
nec sibi quaeque sine alterius vi posse videtur
corporis atque animi seorsum sentire potestas,
sed communibus inter eas conflatur utrimque
motibus accensus nobis per viscera sensus.
praeterea corpus per se nec gignitur umquam
nec crescit neque post mortem durare videtur.
non enim, ut umor aquae dimittit saepe vaporem
qui datus est, neque ea causa convellitur ipse,
sed manet incolumis, non, inquam, sic animai
discidium possunt artus perferre relicti,
sed penitus pereunt convulsi conque putrescunt.
ex ineunte aevo sic corporis atque animai
mutua vitalis discunt contagia motus
maternis etiam membris alvoque reposta,
discidium *ut* nequeat fieri sine peste maloque;

AB, which Lucr. may have written: so *quod vis* AB in 1090: Augustus in his res gestae writes *aliquod*; as does B in VI 317: *capud* A or B repeatedly. 319 *videor* Faber for *video*. *firmare* Ver. Ven. for *formare*. 321 *nobis* Lach. for *noctis*. *dictis* Mar. Ald. 1 Junt. Lamb. ed. 1 and 2. *doctis* Lamb. ed. 3. 332 *fiunt consorti...vita* Mar. Junt. for *consorti fiunt...vitae*. 333 though sound, is much corrupted by Mar. Junt. Lamb. vulg. 335 *eas* Lach. for *eos*; as *eos* is contrary to the usage of Lucr. 346 *reposta* Avanc. for *reposto*. *reposti* Mar. Junt. without sense, not

ut videas, quoniam coniunctast causa salutis,
coniunctam quoque naturam consistere eorum.

Quod superest, siquis corpus sentire refutat
atque animam credit permixtam corpore toto
suscipere hunc motum quem sensum nominitamus,
vel manifestas res contra verasque repugnat.
quid sit enim corpus sentire quis adferet umquam,
si non ipsa palam quod res dedit ac docuit nos?
at dimissa anima corpus caret undique sensu;
perdit enim quod non proprium fuit eius in aevo;
multaque praeterea perdit quam expellitur *ante*.

Dicere porro oculos nullam rem cernere posse,
sed per eos animum ut foribus spectare reclusis,
difficilest, contra cum sensus dicat eorum;
sensus enim trahit atque acies detrudit ad ipsas;
fulgida praesertim cum cernere saepe nequimus,
lumina luminibus quia nobis praepediuntur.
quod foribus non fit; neque enim, quia cernimus ipsi,
ostia suscipiunt ullum reclusa laborem.
praeterea si pro foribus sunt lumina nostra,
iam magis exemptis oculis debere videtur
cernere res animus sublatis postibus ipsis.

Illud in his rebus nequaquam sumere possis,
Democriti quod sancta viri sententia ponit,
corporis atque animi primordia singula privis
adposita alternis variare, ac nectere membra.
nam cum multo sunt animae elementa minora
quam quibus e corpus nobis et viscera constant,
tum numero quoque concedunt et rara per artus
dissita sunt dumtaxat; ut hoc promittere possis,

repostis. 347 *ut* added by Mar. Junt. 350 *refutat*. *renutat* Lamb. 358 *perdit quam expellitur ante* Ed. for *perditum expellitur aevo quam*: the v. is rejected by Creech in notes, and Bern. *Multaque*. *Nullaque* Lach. which seems scarcely to be Latin. Lamb. condemns 357 which Creech well defends. 361 *Difficilest*. *Desiperest* Lamb. ed. 2 and 3, Gif. Lach.: but see notes 2. *dicat* Lamb. for *ducat*. 362 Lamb. rejects. Lach. puts it after 363. 365 *quia* Lach. for *qua*. 372 *privis* Bentl. for *primis*: 389 *priva* is in the mss. 374 *animae elementa minora* AB Nicc.: this I have retained. *animai el. min.* Flor. 31 Camb. Mar. Ald. 1 Junt. vulgo; but the elision is not tolerable. *elementa minora animai* Lach. 375 *e* AB Lamb. ed. 3 Creech Lach. rightly. *et* A corr. B corr.

quantula prima queant nobis iniecta ciere
corpora sensiferos motus in corpore, tanta
intervalla tenere exordia prima animai.
nam neque pulveris interdum sentimus adhaesum
corpore nec membris incussam sidere cretam,
nec nebulam noctu neque aranei tenvia fila
obvia sentimus, quando obretimur euntes,
nec supera caput eiusdem cecidisse vietam
vestem nec plumas avium papposque volantis
qui nimia levitate cadunt plerumque gravatim,
nec repentis itum cuiusviscumque animantis
sentimus nec priva pedum vestigia quaeque,
corpore quae in nostro culices et cetera ponunt.
usque adeo prius est in nobis multa ciendum,
quam primordia sentiscant concussa animai
semina corporibus nostris inmixta per artus,
et quam in his intervallis tuditantia possint
concursare coire et dissultare vicissim.
 Et magis est animus vitai claustra coercens
et dominantior ad vitam quam vis animai.
nam sine mente animoque nequit residere per artus
temporis exiguam partem pars ulla animai,
sed comes insequitur facile et discedit in auras
et gelidos artus in leti frigore linquit.
at manet in vita cui mens animusque remansit.
quamvis est circum caesis lacer undique membris
truncus, adempta anima circum membrisque remota
vivit et aetherias vitalis suscipit auras.
si non omnimodis, at magna parte animai
privatus, tamen in vita cunctatur et haeret;

Nicc. Flor. 31 Camb. all Vat. all eds. bef. Lamb. 3, Gif. Wak. 378 and 380 *prima*. *priva* Bentl. Lach. Ed. in ed. 1: but see notes 2. 383 *aranei* Mar. Ald. 1 Junt. for *arani*: see Lach. 391 *ciendum* Avanc. for *ciendo*. 392 and 393 wrongly transposed by Mar. and in all editions including Lach. Bern. and Ed. formerly. 394 *Et quam in his intervallis* Lach. acutely for *Et quantis int.* *Et quam intervallis tantis* Mar. Ald. 1 Junt. vulg. *Et tantis intervallis* Wak. 400 *et discedit* Vat. 3276 Mar. Ald. 1 Junt. for *ediscedit*. 403 *circum* Flor. 31 Camb. corr. Mar. for *cretum*. 404 *remota* B corr. Lach. for *remot* B, *remotus* A, *remotis* vulg. 405 *aetherias*. *aerias* Lach.: without any just cause he alters this and many passages of Virgil and others on the assumption that *aetheriae*

ut, lacerato oculo circum si pupula mansit
incolumis, stat cernundi vivata potestas,
dummodo ne totum corrumpas luminis orbem
et circum caedas aciem solamque relinquas;
id quoque enim sine pernicie non fiet et orbei.
at si tantula pars oculi media illa peresa est,
occidit extemplo lumen tenebraeque secuntur,
incolumis quamvis aliquoi *sit* splendidus orbis.
hoc anima atque animus vincti sunt foedere semper.
 Nunc age, nativos animantibus et mortalis
esse animos animasque levis ut noscere possis,
conquisita diu dulcique reperta labore
digna tua pergam disponere carmina cura.
tu fac utrumque uno sub iungas nomine eorum,
atque animam verbi causa cum dicere pergam,
mortalem esse docens, animum quoque dicere credas,
quatenus est unum inter se coniunctaque res est.
principio quoniam tenuem constare minutis
corporibus docui multoque minoribus esse
principiis factam quam liquidus umor aquai
aut nebula aut fumus:—nam longe mobilitate
praestat et a tenui causa magis icta movetur;
quippe ubi imaginibus fumi nebulaeque movetur:
quod genus in somnis sopiti ubi cernimus alte
exhalare vaporem altaria ferreque fumum;

cannot be joined with *aurae*. 411 *Et*. *Sed* Mon. Junt. Lamb. etc. wrongly. 412 and 415 are necessary to complete the comparison between the ball and pupil of the eye and the *anima* and *animus*: Lach. ejects them. 412 *et orbei* Ed. for *eorum*: see notes 2: Lamb. ruins the sense by reading *confiet* for *non·fiet*. 415 *alioqui* is corrupt: I transpose a single letter and write *aliquoi*, adding *sit* which could easily fall out before *splendidus*. 420 *Digna tua...cura* Lach. for *Digna tua...vita*. *Perpetua...vita* Bern. with reference I presume to 13 *perpetua semper dignissima vita*: but surely *digna* or *dignissima* would be required: and see notes 2. *Digna tuo...vate* Creech: but *vates* to Lucr. had only a bad meaning. 421 *sub iungas nomine* Ed. for *subiungas nome* (*nomine* B corr.): this the context requires: see notes 2. *subiungas nomen* vulgo. *uni subiungas nomen* Lach. 428 I retain the ms. reading. Lach. writes *iam* for *nam*: but he thereby inverts the argument: comp. 203 sqq. Lucr. says 'the soul is seen to be marvellously nimble: therefore it is formed of very minute seeds': Lachmann's error is most manifest. 430 and 433 are ejected by Lach.: wrongly in my opinion. 430 *movetur* Mar. Junt. for *moventur*. 431 *Quod genus in somnis*. Here again Lach. reads *est* for *in*: comp. II 194. *alte Ex. vaporem* Lach. rightly for *alta Ex. vapore*. 432 *Exha-*

nam procul hinc dubio nobis simulacra genuntur:—
nunc igitur quoniam quassatis undique vasis
diffluere umorem et laticem discedere cernis
et nebula ac fumus quoniam discedit in auras,
crede animam quoque diffundi multoque perire
ocius et citius dissolvi *in* corpora prima,
cum semel ex hominis membris ablata recessit.
quippe etenim corpus, quod vas quasi constitit eius,
cum cohibere nequit conquassatum ex aliqua re
ac rarefactum detracto sanguine venis,
aere qui credas posse hanc cohiberier ullo?
corpore qui nostro rarus magis *is* cohibessit?
  Praeterea gigni pariter cum corpore et una
crescere sentimus pariterque senescere mentem.
nam velut infirmo pueri teneroque vagantur
corpore, sic animi sequitur sententia tenvis.
inde ubi robustis adolevit viribus aetas,
consilium quoque maius et auctior est animi vis.
post ubi iam validis quassatum est viribus aevi
corpus et obtusis ceciderunt viribus artus,
claudicat ingenium, delirat lingua, *labat* mens,
omnia deficiunt atque uno tempore desunt.
ergo dissolui quoque convenit omnem animai
naturam, ceu fumus, in altas aeris auras;
quandoquidem gigni pariter pariterque videmus
crescere et, *ut* docui, simul aevo fessa fatisci.

lare: *exalare*, v 463 *Exalantque*, vi 478 *alitus* AB, followed by Lach. who does not however omit the aspirate, where only A or B omit it, as ii 417 v 253 vi 811 and iv 864 vi 221. '*exala*: this form is better attested by ancient mss. than the common *exhalare*' Halm, Cic. phil. ii 30 ed. Mayor. This seems doubtful even in Cicero: his colleagues, Baiter Tusc. i 43 ii 22 and Jordan Verr. iii 28 retain *h*: of the capital mss. of Virgil only M seems ever to omit it. 433 *hinc* Bentl. for *haec*. *genuntur* Lamb'. for *geruntur*. 438 *Ocius* Nicc. B corr. for *Opius*. *in* added by B corr. 441 *Cum*. *Quam* Mar. Junt. Wak. Lach. 444 *is cohibessit* Lach. for *incohibescit*. *am cohibessit* Lamb. Gif. *incohibessit* Wak. *usque liquescit* Bern. *in quo habitet sit* Ed. in small ed.: *in quo* might be looked on as one word and the elision thus defended; but see Luc. Mueller de re metr. p. 284 and notes 2 to i 1091. 450 *auctior* B corr. Nicc. corr. (?), Flor. 31 Camb. for *auctor*. 453 *lingua, labat mens* Lach. for *lingua mens*. *lingua madet mens* B corr. from 479. *linguaque mensque* Nicc. vulg. 456 *aeris* old eds. for *acris*. 458 *ut* added by B corr. *fatisci* Nicc. Flor. 31 Camb. Vat. Mon. Bentl. for *factis*. *fatiscit* B

  Huc accedit uti videamus, corpus ut ipsum
suscipere inmanis morbos durumque dolorem,
sic animum curas acris luctumque metumque;
quare participem leti quoque convenit esse.
quin etiam morbis in corporis avius errat
saepe animus; dementit enim deliraque fatur
interdumque gravi lethargo fertur in altum
aeternumque soporem oculis nutuque cadenti,
unde neque exaudit voces nec noscere voltus
illorum potis est, ad vitam qui revocantes
circumstant lacrimis rorantes ora genasque.
quare animum quoque dissolui fateare necessest,
quandoquidem penetrant in eum contagia morbi;
nam dolor ac morbus leti fabricator uterquest,
multorum exitio perdocti quod sumus ante.
denique quor, hominem cum vini vis penetravit
acris et in venas discessit diditus ardor,
consequitur gravitas membrorum, praepediuntur
crura vacillanti, tardescit lingua, madet mens,
nant oculi, clamor singultus iurgia gliscunt,
et iam cetera de genere hoc quaecumque secuntur,
cur ea sunt, nisi quod vemens violentia vini
conturbare animam consuevit corpore in ipso?
at quaecumque queunt conturbari inque pediri,
significant, paulo si durior insinuarit
causa, fore ut pereant aevo privata futuro.
quin etiam subito vi morbi saepe coactus
ante oculos aliquis nostros, ut fulminis ictu,
concidit et spumas agit, ingemit et tremit artus,
desipit, extentat nervos, torquetur, anhelat
inconstanter, et in iactando membra fatigat.
nimirum quia vis morbi distracta per artus

corr. Junt. Lamb. not Mar. 472 *dolor* Nicc. for *polor*. 474 475 *Et quoniam mentem sanari corpus ut aegrum Et pariter mentem sanari corpus inani*: an absurd interpolation: 474=510; for 475 Mar. Ald. 1 Junt. substitute 511. Lamb. first expelled both. 476 *quor*. *cōr* AB, which is the same thing: so ii 194, iv 575 *com*=*quom* or *cum*: iv 116 *eorum* AB, *corum* Lach. i.e. *quorum*. *cŏr hominum* Nicc. Flor. 31 Camb. 5 Vat. old eds. before Mar. and Junt.: which Wak. absurdly keeps. 482 *Cur ea sunt* Nicc. for *curba sunt*. 492 *quia* Nicc. Flor. 31 Mar.

turbat, agens animam spumat, quasi in aequore salso
ventorum validis fervescunt viribus undae.
exprimitur porro gemitus, quia membra dolore
adficiuntur et omnino quod semina vocis
eiciuntur et ore foras glomerata feruntur
qua quasi consuerunt et sunt munita viai.
desipientia fit, quia vis animi atque animai
conturbatur et, ut docui, divisa seorsum
disiectatur eodem illo distracta veneno.
inde ubi iam morbi reflexit causa reditque
in latebras acer corrupti corporis umor,
tum quasi vaccillans primum consurgit et omnis
paulatim redit in sensus animamque receptat.
haec igitur tantis ubi morbis corpore in ipso
iactentur miserisque modis distracta laborent,
cur eadem credis sine corpore in aere aperto
cum validis ventis aetatem degere posse?
et quoniam mentem sanari, corpus ut aegrum,
cernimus et flecti medicina posse videmus,
id quoque praesagit mortalem vivere mentem.
addere enim partis aut ordine traiecere aecumst
aut aliquid prorsum de summa detrahere hilum,
commutare animum quicumque adoritur et infit
aut aliam quamvis naturam flectere quaerit,
at neque transferri sibi partis nec tribui vult
inmortale quod est quicquam neque defluere hilum.
nam quodcumque suis mutatum finibus exit,
continuo hoc mors est illius quod fuit ante.
ergo animus sive aegrescit, mortalia signa
mittit, uti docui, seu flectitur a medicina.
usque adeo falsae rationi vera videtur
res occurrere et effugium praecludere eunti
ancipitique refutatu convincere falsum.

Denique saepe hominem paulatim cernimus ire

old eds. for *qua*. 493 *spumat, quasi in* Lach. for *spumans in*, most acutely: former correctors and editors, even Lamb., had quite mistaken the meaning, and joined *agens animam* with *vis morbi*: their various readings are not worth mentioning: Wak. is unusually perverse. 497 *Eiciuntur* Lamb. for *Eliciuntur*: see 58 and IV 945. 523 *rationi* Mar. Ald. 1 Junt. for *rationis*. 525 *refutatu* Mar.

et membratim vitalem deperdere sensum;
in pedibus primum digitos livescere et unguis,
inde pedes et crura mori, post inde per artus
ire alios tractim gelidi vestigia leti.
scinditur itque animae hoc quoniam natura nec uno
tempore sincera existit, mortalis habendast.
quod si forte putas ipsam se posse per artus
introsum trahere et partis conducere in unum
atque ideo cunctis sensum deducere membris,
at locus ille tamen, quo copia tanta animai
cogitur, in sensu debet maiore videri;
qui quoniam nusquamst, nimirum ut diximus *ante*,
dilaniata foras dispargitur, interit ergo.
quin etiam si iam libeat concedere falsum
et dare posse animam glomerari in corpore eorum,
lumina qui lincunt moribundi particulatim,
mortalem tamen esse animam fateare necesse,
nec refert utrum pereat dispersa per auras
an contracta suis e partibus obbrutescat,
quando hominem totum magis ac magis undique sensus
deficit et vitae minus et minus undique restat.

Et quoniam mens est hominis pars una, loco quae
fixa manet certo, velut aures atque oculi sunt
atque alii sensus qui vitam cumque gubernant,
et veluti manus atque oculus naresve seorsum
secreta ab nobis nequeunt sentire neque esse,
sed tamen in parvo licuntur tempore tabe,

Junt. for *refutatur*. 531 *Scinditur itque animae hoc* Ed. for *Scinditur atque animo haec*: comp. 526. *Sc. usque adeo haec* Lach. *Sc. aeque animae haec* Bern. *Sc. atqui animo haec* Mar. Junt. *Sc. atqui animae* Lamb. vulg. 535 *deducere* Camb. Ver. Ven. Mar. for *diducere*. 538 *ante* added by Nicc. 548 *loco quae* Lach. first for *locoque*. 551 *atque. aut* Lach.: but comp. V 965 *glandes atque arbita vel pira lecta*. 553 *Sed tamen in parvo linguntur tempore tali* mss. 'quidam doctus' says Lamb. who condemns the verse '*liquuntur.*' '*linguntur.* mss. puto legend.: *secta etenim parvo vincuntur tempore tabi*, nisi malis *liquuntur...tabi* pro *tabe*, ut *parti contagi* pro *parte contage* vet. passim' Is. Voss. in ms. notes. *Sed tamen* is of course quite right; I have written therefore with Creech in notes *Sed tamen in parvo licuntur tempore tabe* (Aen. III 28 P has *linguntur* for *licuntur* and Lucr. IV 1243 Ver. Ven. have *lignitur* for *liquitur*). *linquuntur* Flor. 31 vulg. *in parvo lincuntur tempore tabi* Lach. 'ita Vergil. *Alitibus linquere feris*, et Ovid. *leto poenaeque relictus*': but the moment the body is dead, *linquitur*

sic animus per se non quit sine corpore et ipso
esse homine, illius quasi quod vas esse videtur
sive aliud quid vis potius coniunctius ei
fingere, quandoquidem conexu corpus adhaeret.
  Denique corporis atque animi vivata potestas
inter se coniuncta valent vitaque fruuntur;
nec sine corpore enim vitalis edere motus
sola potest animi per se natura nec autem
cassum anima corpus durare et sensibus uti.
scilicet avolsus radicibus ut nequit ullam
dispicere ipse oculus rem seorsum corpore toto,
sic anima atque animus per se nil posse videtur.
nimirum quia *per* venas et viscera mixtim,
per nervos atque ossa, tenentur corpore ab omni
nec magnis intervallis primordia possunt
libera dissultare, ideo conclusa moventur
sensiferos motus quos extra corpus in auras
aeris haut possunt post mortem eiecta moveri
propterea quia non simili ratione tenentur.
corpus enim atque animans erit aer, si cohibere
sese anima atque in eo poterit concludere motus
quos ante in nervis et in ipso corpore agebat.
592 quin etiam finis dum vitae vertitur intra,
saepe aliqua tamen e causa labefacta videtur
ire anima ac toto solui de corpore *velle*
et quasi supremo languescere tempore voltus
molliaque exsangui *trunco* cadere omnia membra.

tabi, whether the *tabes* comes at once or years after; so that *tamen in parvo tempore* would have no meaning. 555 *homine* old eds. for *hominem*. *vas esse* Nicc. for *vasse*. 557 558 Lach. has no stop after *adhaeret*, and a comma after *Denique*: 558 begins a new paragraph; and I find from his proof-sheets that he altered the usual punctuation only in his final revise. 564 *ipse oculus* Flor. 31 Mar. (not Nicc. Camb. Brix. Ver. or Ven.) for *oculus ipse*. 566 *per* added by Nicc. *mixtim* Nicc. (not Flor. 31) Camb. Mon. Brix. Ver. Ven. for *mixti*. 571 *moveri* Lamb. for *movere*, 'inscitissime' says Wak.: see notes 2 to VI 595. 573 *animans erit* Lamb. for *animam serit*. 574 *eo* Faber for *eos*: a certain correction rightly admitted by Bentl. and Creech. Lach. strange to say has neglected it and received instead Wakefield's conjecture *In se animam* for *Sese anima*. 576—590 (592—606) Christ quaest. Lucr. p. 19 has acutely seen that these vss. are out of place: he puts them after 579 (594): I put them after 575: see notes 2. 578 *de corpore velle* Lach. acutely for *de corpore omnia membra* which has come from

quod genus est, animo male factum cum perhibet*ur*
aut animam liquisse; ubi iam trepidatur et omnes
extremum cupiunt vitae repraehendere vinclum.
conquassatur enim tum mens animaeque potestas
omnis et haec ipso cum corpore conlabefiunt;
ut gravior paulo possit dissolvere causa.
quid dubitas tandem quin extra prodita corpus
inbecilla foras in aperto, tegmine dempto,
non modo non omnem possit durare per aevom,
sed minimum quodvis nequeat consistere tempus?
576 quare etiam atque etiam resoluto corporis omni
tegmine et eiectis extra vitalibus auris
dissolui sensus animi fateare necessest
atque animam, quoniam coniunctast causa duobus.
  Denique cum corpus nequeat perferre animai
discidium quin in taetro tabescat odore,
quid dubitas quin ex imo penitusque coorta
emanarit uti fumus diffusa animae vis,
atque ideo tanta mutatum putre ruina
conciderit corpus, penitus quia mota loco sunt
fundamenta, foras anima emanante per artus
perque viarum omnis flexus, in corpore qui sunt,
atque foramina? multimodis ut noscere possis
dispertitam animae naturam exisse per artus
et prius esse sibi distractam corpore in ipso,
quam prolapsa foras enaret in aeris auras.
nec sibi enim quisquam moriens sentire videtur
ire foras animam incolumem de corpore toto
nec prius ad iugulum et supera succedere fauces,
verum deficere in certa regione locatam;
ut sensus alios in parti quemque sua scit
dissolui. quod si inmortalis nostra foret mens,
non tam se moriens dissolvi conquereretur,
sed magis ire foras vestemque relinquere, ut anguis.

580: Nicc. Mon. Brix. Ver. Ven. omit 579 and 580. 580 *trunco* added by Lach. *cadere omnia corpore membra* Flor. 31 Camb. Mar. vulg. 581 *perhibetur* B corr. for *peribet* B, *periberet* A Nicc. 591 *Quare* Nicc. B corr. for *Quae*. 597 *ex* Flor. 31 Camb. for *ea*. 598 *animae vis* Flor. 31 Camb. Ver. Ven. Mar. etc. for *anima eius*. 601 *foras anima emanante* Wak. for *foras manant animaeque*. *foras manante anima usque* Lach. After 614 Mar. Ald. 1 Junt. vulg. add

Denique cur animi numquam mens consiliumque
gignitur in capite aut pedibus manibusve, sed unis
sedibus et certis regionibus omnibus haeret,
si non certa loca ad nascendum reddita cuique
sunt, et ubi quicquid possit durare creatum,

*

atque ita multimodis partitis artubus esse,
membrorum ut numquam existat praeposterus ordo?
usque adeo sequitur res rem neque flamma creari
fluminibus solitast neque in igni gignier algor.
Praeterea si inmortalis natura animaist
et sentire potest secreta a corpore nostro,
quinque, ut opinor, eam faciundum est sensibus auctam;
nec ratione alia nosmet proponere nobis
possumus infernas animas Acherunte vagari.
pictores itaque et scriptorum saecla priora
sic animas intro duxerunt sensibus auctas.
at neque sorsum oculi neque nares nec manus ipsa
esse potest animae neque sorsum lingua, neque aures
auditu per se possunt sentire neque esse.
Et quoniam toto sentimus corpore inesse
vitalem sensum et totum esse animale videmus,
si subito medium celeri praeciderit ictu
vis aliqua ut sorsum partem secernat utramque,
dispertita procul dubio quoque vis animai
et discissa simul cum corpore dissicietur.
at quod scinditur et partis discedit in ullas,
scilicet aeternam sibi naturam abnuit esse.
falciferos memorant currus abscidere membra
saepe ita de subito permixta caede calentis,
ut tremere in terra videatur ab artubus id quod
decidit abscisum, cum mens tamen atque hominis vis
mobilitate mali non quit sentire dolorem;
et semel in pugnae studio quod dedita mens est,

Gauderet, praelonga senex aut cornua cervus. 617 *regionibus omnibus haeret. regionibu' pectoris h.* Lach. *hominis reg. haeret* Ed. formerly. After 619 some vss. are lost. 620 *partitis* Bern. for *pro totis*. *perfectis* Lach. 623 *solita neque insigni* AB. *in igni* Nicc. *solita est* Flor. 31 Camb. Pont. Mar. 624 *si immortalis* Nicc. for *si mortalis*. 628 *vagari* Lach. for *vacare*. *vagare* B corr. Lamb. vulg. perhaps rightly. 632 *animae* Pius conj. for *anima*. 633 *Auditu* Ed. for *Auditum*. *Haud igitur* Lach. who here begins a new sentence.

corpore reliqüo pugnam caedesque petessit,
nec tenet amissam laevam cum tegmine saepe
inter equos abstraxe rotas falcesque rapaces,
nec cecidisse alius dextram, cum scandit et instat.
inde alius conatur adempto surgere crure,
cum digitos agitat propter moribundus humi pes.
et caput abscisum calido viventeque trunco
servat humi voltum vitalem oculosque patentis,
donec reliquias animai reddidit omnes.
quin etiam tibi si, lingua vibrante, micanti
serpentis cauda e procero corpore, utrumque

. . . .

sit libitum in multas partis discidere ferro,
omnia iam sorsum cernes ancisa recenti
volnere tortari et terram conspargere tabo,
ipsam seque retro partem petere ore priorem,
volneris ardenti ut morsu premat icta dolorem.
omnibus esse igitur totas dicemus in illis
particulis animas? at ea ratione sequetur
unam animantem animas habuisse in corpore multas.
ergo divisast ea quae fuit una simul cum
corpore; quapropter mortale utrumque putandumst,
in multas quoniam partis disciditur aeque.
Praeterea si inmortalis natura animai
constat et in corpus nascentibus insinuatur,
cur super anteactam aetatem meminisse nequimus
nec vestigia gestarum rerum ulla tenemus?
nam si tanto operest animi mutata potestas,
omnis ut actarum exciderit retinentia rerum,
non, ut opinor, id a leto iam longiter errat;
quapropter fateare necessest quae fuit ante

647 *semel* Lach. for *simul*. 650 *rotas* Nicc. for *rote*. 657 658 *micanti* and *cauda e* Ed. with Lach. for *minanti* and *caude*. 658 a v. is lost here such as *Et caudam et molem totius corporis omnem*: see VI 499: Lach. reads *serpentem* for *serpentis*, *utrimque* after Mar. Junt. for *utrumque*; and after all his construction is very forced. *l. v. minantis Serpentis caudam procero corpore, utrinque* Lamb. 662 *seque retro* Nicc. for *sequere retro*. 663 *dolorem* Lach. for *dolore*. 674 *tanto operest animi* Mar. for *tanto opere animist*, 680 *solitast animi* Mar. Ald. 1 for *solita animist*: see 623, II 275 and Lach. there. 676 *a leto* Lach., *longiter* Lamb. Lach. from Charisius and Nonius,

interiisse et quae nunc est nunc esse creatam.
  Praeterea si iam perfecto corpore nobis
inferri solitast animi vivata potestas
tum cum gignimur et vitae cum limen inimus,
haud ita conveniebat uti cum corpore et una
cum membris videatur in ipso sanguine cresse,
sed velut in cavea per se sibi vivere solam.
CONVENIT UT SENSU CORPUS TAMEN AFFLUAT OMNE
690 quod fieri totum contra manifesta docet res;
namque ita conexa est per venas viscera nervos
ossaque, uti dentes quoque sensu participentur;
morbus ut indicat et gelidai stringor aquai
et lapis oppressus, subiit si e frugibus, asper.
686 quare etiam atque etiam neque originis esse putandumst
expertis animas nec leti lege solutas.
nam neque tanto opere adnecti potuisse putandumst
689 corporibus nostris extrinsecus insinuatas,
nec, tam contextae cum sint, exire videntur
incolumes posse et salvas exsolvere sese
omnibus e nervis atque ossibus articulisque.
quod si forte putas extrinsecus insinuatam
permanare animam nobis per membra solere,
tanto quique magis cum corpore fusa peribit.
quod permanat enim dissolvitur, interit ergo.
dispertitus enim per caulas corporis omnis
ut cibus, in membra atque artus cum diditur omnis,
disperit atque aliam naturam sufficit ex se,
sic anima atque animus quamvis integra recens *in*
corpus eunt, tamen in manando dissoluuntur,
dum quasi per caulas omnis diduntur in artus
particulae quibus haec animi natura creatur,
quae nunc in nostro dominatur corpore nata

for *ab l. longius.* 685 Lamb. has most properly rejected: it is clearly a sarcastic gloss. Lach. retains it and for *affluat* reads *arceat*: an unlikely conjecture. 686—690 (690—694): Lach. was the first to transpose these vss.; and strange it is he should have been the first. 689 *Morbus. Morsus* Lach. Bern. Ed. formerly. 690 *oppressus, subiit si e frugibus* Bern. for *oppressus subitis e frugibus. expressus, subiens e fr.* Lach. 702 *Dispertitus enim* Lach. for *dispertitur ergo. Dispertitur enim* Pont. Brix. Ald. 1 Lamb.
  705 *quamvis integra recens in* Mar. Ald. 1 Junt. for *quamvis est integra re-*

ex illa quae tum periit partita per artus.
quapropter neque natali privata videtur
esse die natura animae nec funeris expers.
  Semina praeterea linquontur necne animai
corpore in exanimo? quod si lincuntur et insunt,
haut erit ut merito inmortalis possit haberi,
partibus amissis quoniam libata recessit.
sin ita sinceris membris ablata profugit
ut nullas partis in corpore liquerit ex se,
unde cadavera rancenti iam viscere vermes
expirant atque unde animantum copia tanta
exos et exanguis tumidos perfluctuat artus?
quod si forte animas extrinsecus insinuari
vermibus et privas in corpora posse venire
credis nec reputas cur milia multa animarum
conveniant unde una recesserit, hoc tamen est ut
quaerendum videatur et in discrimen agendum,
utrum tandem animae venentur semina quaeque
vermiculorum ipsaeque sibi fabricentur ubi sint,
an quasi corporibus perfectis insinuentur.
at neque cur faciant ipsae quareve laborent
dicere suppeditat. neque enim, sine corpore cum sunt,
sollicitae volitant morbis alguque fameque;
corpus enim magis his vitiis adfine laborat
et mala multa animus contage fungitur eius.
sed tamen his esto quamvis facere utile corpus,
cum subeant; at qua possint via nulla videtur.
haut igitur faciunt animae sibi corpora et artus.
nec tamen est utqui perfectis insinuentur
corporibus; neque enim poterunt suptiliter esse

cens. 710 *tum* Brix. Ver. Ven. rightly for *tunc.* *periit. peritat* Nicc. and later mss. and eds. before Pont. Junt. 718 *Ut* Ver. Ven. for *Et.* 723 *privas in* B corr. for *priva si.* 732 *alguque* Lamb. and mss. of Nonius for *algoque.* 733 *adfine* A p. m. (?) *atfine* B. *et fine* A corr. Nicc.: Gif. first restored *adfine* to text: the note in ed. 3 of Lamb. is amusing. Wak. returns to *et fine.* 734 *contage. contagibus* Lach. 736 *Cum subeant. Quod subeant* a friend of Faber's, both Faber and Bentl. approving. *Cui s.* Bern. *qua* Mar. Ald. 1 Junt. for *que.* 738 *utqui* Ed. for *ut quicum*: see notes 2 to I 755: *cum* was written over *qui* by some one who did not understand *qui*: *quidum* Bern. and Ed. in ed. 1. Lach. adopts from Lamb. *ut iam*, which he allows 'a

conexae neque consensus contagia fient.
Denique cur acris violentia triste leonum
seminium sequitur, volpes dolus, et fuga cervos,
A PATRIBUS DATUR ET A PATRIUS PAVOR INCITAT ARTUS
et iam cetera de genere hoc cur omnia membris
ex ineunte aevo generascunt ingenioque,
si non, certa suo quia semine seminioque
vis animi pariter crescit cum corpore toto?
quod si inmortalis foret et mutare soleret
corpora, permixtis animantes moribus essent,
effugeret canis Hyrcano de semine saepe
cornigeri incursum cervi tremeretque per auras
aeris accipiter fugiens veniente columba,
desiperent homines, saperent fera saecla ferarum.
illud enim falsa fertur ratione, quod aiunt
inmortalem animam mutato corpore flecti.
quod mutatur enim dissolvitur, interit ergo;
traiciuntur enim partes atque ordine migrant;
quare dissolui quoque debent posse per artus,
denique ut intereant una cum corpore cunctae.
sin animas hominum dicent in corpora semper
ire humana, tamen quaeram cur e sapienti
stulta queat fieri, nec prudens sit puer ullus
nec tam doctus equae pullus quam fortis equi vis.
scilicet in tenero tenerascere corpore mentem
confugient. quod si iam fit, fateare necessest
mortalem esse animam, quoniam mutata per artus
tanto opere amittit vitam sensumque priorem.
quove modo poterit pariter cum corpore quoque
confirmata cupitum aetatis tangere florem

litteris nimium recedere'. 740 *consensus* Lach. for *consensu*. 743 rightly rejected by Lach. and before him by a 'doctus quidam' ap. Lamb. as a manifest sarcastic gloss, which interrupts sense and construction: Ven. Ald. 1, not Pont. Mar. or Junt., read *cerris* for *cervos*. Lamb. *dolu' vulpibus* also. 747 *toto* B, *quoque* A and all other mss. and old eds. '*toto* praetuli, quia non possum ullam artem agnoscere in simili hoc trium versiculorum exitu, *ingenioque*, *seminioque*, *corpore quoque*. non potest autem dubitari quin utraque scriptura fuerit in archetypo' Lach. Lamb. also has *toto*: *quoque* seems a gloss from 769. 760 *sin* Pont. Mar. Ald. 1 Junt. for *sic*. *corpora* B corr. etc. for *corpore*. 763 = 746: of course a gloss, with no connexion with the text. Bern. includes 764 in the gloss, in my opinion not rightly. 764 *pullus* Nicc. for *paulus*. 784 *in*

vis animi, nisi erit consors in origine prima?
quidve foras sibi vult membris exire senectis?
an metuit conclusa manere in corpore putri
et domus aetatis spatio ne fessa vetusto
obruat? at non sunt immortali ulla pericla.
Denique conubia ad Veneris partusque ferarum
esse animas praesto deridiculum esse videtur,
expectare immortalis mortalia membra
innumero numero certareque praeproperanter
inter se quae prima potissimaque insinuetur;
si non forte ita sunt animarum foedera pacta
ut quae prima volans advenerit insinuetur
prima neque inter se contendant viribus hilum.
Denique in aethere non arbor, non aequore in alto
nubes esse queunt nec pisces vivere in arvis
nec cruor in lignis neque saxis sucus inesse.
certum ac dispositumst ubi quicquit crescat et insit.
sic animi natura nequit sine corpore oriri
sola neque a nervis et sanguine longiter esse.
quod si (posset enim multo prius) ipsa animi vis
in capite aut umeris aut imis calcibus esse
posset et innasci quavis in parte, soleret
tandem in eodem homine atque in eodem vase manere.
quod quoniam nostro quoque constat corpore certum
dispositumque videtur ubi esse et crescere possit
sorsum anima atque animus, tanto magis infitiandum
totum posse extra corpus durare genique.
quare, corpus ubi interiit, periisse necessest
confiteare animam distractam in corpore toto.
quippe etenim mortale aeterno iungere et una
consentire putare et fungi mutua posse
desiperest; quid enim diversius esse putandumst

alto. *salso* Lach. because *salso* is found in the repetition of this passage v 128: but as Lucr. so often varies in such points, I cannot bring myself to depart from the mss. 789 *longiter* Lamb. Lach. *longius* all mss. here and v 133: comp. 676. 790—793 are repeated v 134—137 without the mss. differing in a single letter. I flatter myself I have made the passage clear by a correct punctuation without the change of a word: 790 *posset enim multo prius* I enclose in brackets, and begin the apodosis at *soleret*. Lach. here and in v reads *Quid si posset enim? multo*. Mar. Ald. 1 Junt. vulg. give *Hoc si posset enim, multo*. 800 *mortale*

aut magis inter se disiunctum discrepitansque,
quam mortale quod est inmortali atque perenni
iunctum in concilio saevas tolerare procellas?
quod si forte ideo magis immortalis habendast, 819
quod letalibus ab rebus munita tenetur,
aut quia non veniunt omnino aliena salutis
aut quia quae veniunt aliqua ratione recedunt
pulsa prius quam quid noceant sentire queamus,
. . . .
praeter enim quam quod morbis cum corporis aegret,
advenit id quod eam de rebus saepe futuris
macerat inque metu male habet curisque fatigat
praeteritisque male admissis peccata remordent.
adde furorem animi proprium atque oblivia rerum,

Junt. for *mortalem*. 805 *saevas* Mar. Junt. for *salvas*. 806—818 = v 351—363 word for word: they here interrupt the argument, and are of course one of the many glosses with which some reader has wished either to explain or refute the poet by quoting his own verses for or against him, as the case may be. But as that which follows in the fifth book applies only to the heaven, not to the mind of which Lucr. is here speaking, he did not continue his quotation; but Ald. 1 and Junt. after Marullus followed by all editors before Lach. add v 364—373, rudely altered to suit the present subject. 'at Michahel Marullus' says Lach. justly indignant 'illo [lectore] audacior nihil veritus est ceteris transferendis immanes ineptias inferre; quos versus cum omnes libris veteribus sine exceptione omnibus abesse aut scirent aut certe deberent scire, plerique sine admonitione susceperunt, Wakefieldus, cui Forbiger adsensus est, "poetae" (id est Marulli) miratur "consideratam severitatem diligitque, per tam dilucidam ratiocinationem simpliciter mentem suam exponentis". mihi Marulli male sedula simplicitas non nimis exagitanda esse videtur: subiciam tamen eius versiculos, ut appareat quae Lambinis et Wakefieldis (ceteros nunc omitto) Lucretio dignissima visa fuerint. *At neque, uti docui, solido cum corpore* mentis *Natura est, quoniam admistum est in rebus inane, Nec tamen est ut inane, neque autem corpora desunt Ex infinito, quae possint forte coorta Corruere hanc* mentis *violento turbine* molem, *Aut aliam quamvis cladem importare pericli, Nec porro natura loci spaciumque profundi Deficit, expargi quo* possit vis animai *Aut alia quavis* possit *vi pulsa perire, Haud igitur leti praeclusa est ianua* menti'. 820 *letalibus* Lamb. for *vitalibus*. After 823 a verse is lost, which Lach. thus supplies, *Multa tamen tangunt animam mala, multa pericla*. Mar. Ald. 1 and Junt. insert after 820 the following, *Scilicet a vera longe ratione remotumst*; which Lamb. retained, but placed after 823.

824 *morbist cum corporis aegrit* AB. *morbis* Avanc. first: no 'Italus' before him. *aegret* Gif. in notes rightly for *aegrit*. Nicc., deceived by *morbist* and thinking *cum* a conjunction, wrote *cum corpus aegrotat*, which led to endless confusion in later mss. and eds.: even Lamb. was misled, and Creech and others before Lach. neglected Gifanius' hint. 826 *macerat* Flor. 31 Pont. Mar. Ald. 1 Junt. for *maceret*: yet Wak. retains the solecism.

adde quod in nigras lethargi mergitur undas.
Nil igitur mors est ad nos neque pertinet hilum,
quandoquidem natura animi mortalis habetur,
et velut anteacto nil tempore sensimus aegri,
ad confligendum venientibus undique Poenis,
omnia cum belli trepido concussa tumultu
horrida contremuere sub altis aetheris oris,
in dubioque fuere utrorum ad regna cadendum
omnibus humanis esset terraque marique,
sic, ubi non erimus, cum corporis atque animai
discidium fuerit quibus e sumus uniter apti,
scilicet haud nobis quicquam, qui non erimus tum,
accidere omnino poterit sensumque movere,
non si terra mari miscebitur et mare caelo.
et si iam nostro sentit de corpore postquam
distractast animi natura animaeque potestas,
nil tamen est ad nos qui comptu coniugioque
corporis atque animae consistimus uniter apti.
nec, si materiem nostram collegerit aetas
post obitum rursumque redegerit ut sita nunc est
atque iterum nobis fuerint data lumina vitae,
pertineat quicquam tamen ad nos id quoque factum,
interrupta semel cum sit repetentia nostri.
et nunc nil ad nos de nobis attinet, ante
qui fuimus, *neque* iam de illis nos adficit angor.
nam cum respicias inmensi temporis omne
praeteritum spatium, tum motus materiai
multimodis quam sint, facile hoc adcredere possis,
semina saepe in eodem, ut nunc sunt, ordine posta
865 haec eadem, quibus e nunc nos sumus, ante fuisse.
858 nec memori tamen id quimus repraehendere mente;
inter enim iectast vitai pausa vageque

829 *nigras*. 'f. *pigras*' Heins. in ms. notes: Markland proposed the same, but without cause. 835 *aetheris oris* Gif. for *aetheris auris*; and so Lucr. always writes elsewhere. 844 *Distractast* Nicc. for *Distractas*. 847 *materiem* B, *materiam* A Nicc. 851 *repetentia* B rightly. *repentia* A Nicc. Flor. 31 Camb. *retinentia* Avanc. Lach. *nostri* Pius in notes, Gif. Lach. for *nostris*. *nobis* Pont. Avanc. *nostra* Mar. Junt. vulg. 853 *neque* added by Lach. *nec* Mar. Ald. 1 Junt. vulg. *adficit* Flor. 31 Mon. Pont. for *adfigit*. 856 *multimodis* Lach. with Wakefield's Δ for *multimodi*. 858 (865) transferred here

deerrarunt passim motus ab sensibus omnes.
debet enim, misere si forte aegreque futurumst,
ipse quoque esse in eo tum tempore, cui male possit
accidere. id quoniam mors eximit, esseque probet
864 illum cui possint incommoda conciliari,
scire licet nobis nil esse in morte timendum
nec miserum fieri qui non est posse neque hilum
differre anne ullo fuerit iam tempore natus,
mortalem vitam mors cum inmortalis ademit.
  Proinde ubi se videas hominem indignarier ipsum,
post mortem fore ut aut putescat corpore posto
aut flammis interfiat malisve ferarum,
scire licet non sincerum sonere atque subesse
caecum aliquem cordi stimulum, quamvis neget ipse
credere se quemquam sibi sensum in morte futurum.
non, ut opinor, enim dat quod promittit et unde,
nec radicitus e vita se tollit et eicit,
sed facit esse sui quiddam super inscius ipse.
vivus enim sibi cum proponit quisque futurum,
corpus uti volucres lacerent in morte feraeque,
ipse sui miseret; neque enim se dividit illim,
nec removet satis a proiecto corpore et illum
se fingit sensuque suo contaminat astans.
hinc indignatur se mortalem esse creatum
nec videt in vera nullum fore morte alium se
qui possit vivus sibi se lugere peremptum
stansque iacentem *se* lacerari urive dolere.

by Lach. who is naturally surprised that it was left for him to do. 862 *misere si* Pont. Turnebus and Is. Voss. in ms. notes, before Lach., for *miserest*.
864 *mors* B corr. Flor. 31 for *mox*. *probet* Lach. *prohibet* Turnebus for *prohibe*. 868 *Differre anne ullo* Ed. for *Differre annullo anullo* A, *anullo anullo* B. *a nullo* Nicc. *isne ullo* Ed. in small ed. *Differre ante ullo* Lach.; but *differre fuerit* seems not to be Latin. *Differre an nullo* of Pont. Mar. Ald. 1 Junt. Lamb. etc. has no sense. 871 *putescat* Avanc. Wak. Lach. for *putes. putrescat* Flor. 31 Pont. Mar. Junt. Lamb. vulg. Cic. de fin. v 38 *ne putisceret* Nonius, *putresceret* mss.: de nat deor. II 160 *ne putesceret* mss. speaking of the same thing. 873 *non sincerum* Flor. 31 Camb. Pont. Mar. for *no sincerum* A. Nicc., *nos sinc.* B. 880 *lacerent* Nicc. for *iacerent*. 881 *dividit illim* A. *vidit illum* B. *dividit illum* Nicc. *dividit hilum* Flor. 31 Camb. Mar. *vindicat hilum* Lamb. 886 *Qui* Flor. 31 Mon. Pont. Ald. 1 Junt. for *Cui*.
887 *se* added by Flor. 31 Camb. Avanc. *dolere* Mon. p. m. Lamb. for *dolore*.

nam si in morte malumst malis morsuque ferarum
tractari, non invenio qui non sit acerbum
ignibus inpositum calidis torrescere flammis
aut in melle situm suffocari atque rigere
frigore, cum summo gelidi cubat aequore saxi,
urgerive superne obtritum pondere terrae.
  'Iam iam non domus accipiet te laeta, neque uxor
optima nec dulces occurrent oscula nati
praeripere et tacita pectus dulcedine tangent.
non poteris factis florentibus esse, tuisque
praesidium. misero misere' aiunt 'omnia ademit
una dies infesta tibi tot praemia vitae.'
illud in his rebus non addunt 'nec tibi earum
iam desiderium rerum super insidet una.'
quod bene si videant animo dictisque sequantur,
dissoluant animi magno se angore metuque.
'tu quidem ut es leto sopitus, sic eris aevi
quod superest cunctis privatu' doloribus aegris:
at nos horrifico cinefactum te prope busto
insatiabiliter deflevimus, aeternumque
nulla dies nobis maerorem e pectore demet.'
illud ab hoc igitur quaerendum est, quid sit amari
tanto opere, ad somnum si res redit atque quietem,
cur quisquam aeterno possit tabescere luctu.
  Hoc etiam faciunt ubi discubuere tenentque
pocula saepe homines et inumbrant ora coronis,
ex animo ut dicant 'brevis hic est fructus homullis;
iam fuerit neque post umquam revocare licebit.'
tamquam in morte mali cum primis hoc sit eorum,
quod sitis exurat miseros atque arida torres,
aut aliae cuius desiderium insideat rei.
nec sibi enim quisquam tum se vitamque requirit,

893 *obtritum* Pont. Mar. Ald. 1 Junt. for *obrutum*. 894 *Iam iam* Flor. 31 4 Vat. Lach. *Amiam* A Nicc. *Vimiam* B. *At iam* Pont. Mar. Ald. 1 Junt. vulg. *At iam* is perhaps right. 897 898 Lamb. has departed widely from the mss. without any cause, reading *tibi fortibus* for *florentibus*, *miser o miser* for *misero misere*. 902 *quod* Nicc. for *Quo*. 904—908: to these verses Bern. has properly attached the mark of apostrophe. 914 *fructus* Flor. 31 Camb. for *fluctus*. 917 *torres* Lach. for *torret* A, *torrat* A corr. B Nicc. *terra* Flor. 31 Camb. Mon. Lamb. 919 *requirit* Flor. 29 corr. (Politian?) Camb. corr.

cum pariter mens et corpus sopita quiescunt;
nam licet aeternum per nos sic esse soporem,
nec desiderium nostri nos adficit ullum.
et tamen haudquaquam nostros tunc illa per artus
longe ab sensiferis primordia motibus errant,
cum correptus homo ex somno se colligit ipse.
multo igitur mortem minus ad nos esse putandumst,
si minus esse potest quam quod nil esse videmus;
maior enim turbae disiectus materiai
consequitur leto nec quisquam expergitus exstat,
frigida quem semel est vitai pausa secuta.
  Denique si vocem rerum natura repente
mittat et hoc alicui nostrum sic increpet ipsa
'quid tibi tanto operest, mortalis, quod nimis aegris
luctibus indulges? quid mortem congemis ac fles?
nam gratis anteacta fuit tibi vita priorque
et non omnia pertusum congesta quasi in vas
commoda perfluxere atque ingrata interiere:
cur non ut plenus vitae conviva recedis
aequo animoque capis securam, stulte, quietem?
sin ea quae fructus cumque es periere profusa
vitaque in offensust, cur amplius addere quaeris,
rursum quod pereat male et ingratum occidat omne,
non potius vitae finem facis atque laboris?
nam tibi praeterea quod machiner inveniamque,
quod placeat, nil est: eadem sunt omnia semper.
si tibi non annis corpus iam marcet et artus
confecti languent, eadem tamen omnia restant,
omnia si pergas vivendo vincere saecla,
atque etiam potius, si numquam sis moriturus,'

Nauger. for *requiret.* 921 *esse soporem* A Nicc. vulg. *esse praemo* B: a mere blunder, the *so* being absorbed in *esse*: yet Bern. reads *per aevum.* 922 *adficit* Lamb. ed. 1 and 2, Heins. in ms. notes for *adigit.* *attigit* Flor. 31 Camb. Mar. Avanc. Lamb. ed. 3. 935 *Nam gratis anteacta fuit tibi vita priorque* Ed. for *N. gr. fuit tibi vita anteacta priorque.* Perhaps Lucr. wrote *Nam gratis fuvit* or *fūit tibi* cet.: the *ū* is common in old writers. *N. gr. fuit haec t. v. a. pr.* Lach. *N. si grata f. t. v. a. p.* Nauger. *Nam gratis fluxit* cet. Mar. Junt. *Nam gratum f. t. v.* Nicc. *Nam gratisne fuit* Bern. 941 *offensust* Lamb. for *offensost.* 942 *male et* B Flor. 31 etc. rightly. *mali et* A Nicc. Camb. Wak. 943 *finem facis* Avanc. for *finem iacis.* 945 *placeat* Nicc. for *placet.* 948 *pergas* Lamb. ed. 3 for *perges.* 950 *nisi* Mar. Junt. for

quid respondemus, nisi iustam intendere litem
naturam et veram verbis exponere causam?
955 grandior hic vero si iam seniorque queratur
952 atque obitum lamentetur miser amplius aequo,
non merito inclamet magis et voce increpet acri?
954 'aufer abhinc lacrimas, balatro, et compesce querellas.
omnia perfunctus vitai praemia marces.
sed quia semper aves quod abest, praesentia temnis,
inperfecta tibi elapsast ingrataque vita
et nec opinanti mors ad caput adstitit ante
quam satur ac plenus possis discedere rerum.
nunc aliena tua tamen aetate omnia mitte
aequo animoque agedum magnus concede: necessest.'
iure, ut opinor, agat, iure increpet inciletque;
cedit enim rerum novitate extrusa vetustas
semper, et ex aliis aliud reparare necessest;
nec quisquam in barathrum nec Tartara deditur atra:
materies opus est ut crescant postera saecla;
quae tamen omnia te vita perfuncta sequentur;
nec minus ergo ante haec quam tu cecidere, cadentque.
sic alid ex alio numquam desistet oriri
vitaque mancipio nulli datur, omnibus usu.
respice item quam nil ad nos anteacta vetustas
temporis aeterni fuerit, quam nascimur ante.
hoc igitur speculum nobis natura futuri
temporis exponit post mortem denique nostram.
numquid ibi horribile apparet, num triste videtur
quicquam, non omni somno securius exstat?
  Atque ea nimirum quaecumque Acherunte profundo
prodita sunt esse, in vita sunt omnia nobis.

si. 952 (955) placed here first by Lach. 955 *balatro* certain critics in Turneb. advers. and Heins. in ms. notes for *baratre.* *barde* Ald. 1 Junt. not Mar. 958 *inperfecta* Flor. 31 Camb. for *inperfecte.* 960 *discedere* Nicc. for *discere.* 962 *agedum* Nicc. for *agendum.* *magnus* 'censor Orellii Ienenis' for *magnis.* *iam aliis* Mar. Ald. 1 Junt. vulg. *dignis* Lach. *gnatis* Bern. *humanis* and *mage sis* Ed. formerly. 966 *deditur* A Nicc. *dedit* B. *decidit* B corr. Lamb. 978 *Atque ea nimirum* AB Flor. 31 Camb. 2 Vat. Priscian rightly. Nicc. has *Atque animarum etiam*: a strange error which is repeated by 2 Vat. Brix. Ver. Ven. Mar. Ald. 1 and 2, Junt.: the last four read *Atqui.* Avanc. however at the end of his Catullus rightly recalls *Atque ea nimirum*; as do Lamb. vulg. but not

nec miser inpendens magnum timet aere saxum
Tantalus, ut famast, cassa formidine torpens;
sed magis in vita divom metus urget inanis
mortalis casumque timent quem cuique ferat fors.
nec Tityon volucres ineunt Acherunte iacentem
nec quod sub magno scrutentur pectore quicquam
perpetuam aetatem possunt reperire profecto.
quamlibet immani proiectu corporis exstet,
qui non sola novem dispessis iugera membris
optineat, sed qui terrai totius orbem,
non tamen aeternum poterit perferre dolorem
nec praebere cibum proprio de corpore semper.
sed Tityos nobis hic est, in amore iacentem
quem volucres lacerant atque exest anxius angor
aut alia quavis scindunt cuppedine curae.
Sisyphus in vita quoque nobis ante oculos est
qui petere a populo fasces saevasque secures
imbibit et semper victus tristisque recedit.
nam petere imperium quod inanest nec datur umquam,
atque in eo semper durum sufferre laborem,
hoc est adverso nixantem trudere monte
saxum quod tamen *e* summo iam vertice rusum
volvitur et plani raptim petit aequora campi.
deinde animi ingratam naturam pascere semper

Wak. 983 *cuique*. *cumque* B Lamb. etc. wrongly. 985 *quod* Camb. Junt. etc. for *quid*. 988 *dispessis* Turneb. for *dispersis*: so Ed. in II 1126: comp. Ovid. met. IV 458, and Plaut. miles 1407. *dispensis* Lamb. ed. 3. 'leg. distensis dispansis' Heins. in ms. notes. 992 *est* B corr. Flor. 31 for *es*. *et* Nicc. 994 *cuppedine* Pont. Lamb. rightly, as V 45 VI 25. *curpedine* AB. *turpedine* A corr. Nicc. Flor. 31 Camb. Junt. etc. *torpedine* Ven. Ald. 1 Gif. who says 'Ita v. nostri et aliorum fere. in q. v. *cuppedine*, quod inrepsisse puto ex aliis locis inf. lib. 5 et 6...contra Marull. ex hoc loco mutarat inf. lib. 5 et 6 *torpedine* pro *cupp.* supposito'. Now the Junt. reads here, as I have said, *turpedine*; V 45 and VI 25 *cupedinis*. Again Ven. not Brix. or Ver. *torpedine* here. This therefore is one of many proofs, some of which I have given elsewhere, that Gifanius had the old Venice edition with Marullus' ms. notes before him, and that this is the book belonging to Sambucus of which he speaks both in his preface to Sambucus himself and in his address to the reader: see above p. 9. [*turpedine* Mon. as I now find: and the corrector Marullus repeats the words in marg. as notable: *torpedine* must have been an earlier notion of Marullus; as in V and VI he properly corrects the ms. reading to *cuppedinis*.] 1001 *e summo iam vertice* Pont. Avanc. for *summo iam vertice*. *summo iam e vertice* Flor. 31 Camb. *a su. i. v.*

atque explere bonis rebus satiareque numquam,
quod faciunt nobis annorum tempora, circum
cum redeunt fetusque ferunt variosque lepores,
nec tamen explemur vitai fructibus umquam,
hoc, ut opinor, id est, aevo florente puellas
quod memorant laticem pertusum congerere in vas,
quod tamen expleri nulla ratione potestur.
Cerberus et furiae iam vero et lucis egestas

*

Tartarus horriferos eructans faucibus aestus,
qui neque sunt usquam nec possunt esse profecto.
sed metus in vita poenarum pro male factis
est insignibus insignis scelerisque luella,
carcer et horribilis de saxo iactu' deorsum,
verbera carnifices robur pix lammina taedae;
quae tamen etsi absunt, at mens sibi conscia factis
praemetuens adhibet stimulos terretque flagellis
nec videt interea qui terminus esse malorum
possit nec quae sit poenarum denique finis
atque eadem metuit magis haec ne in morte gravescant.
hic Acherusia fit stultorum denique vita.
Hoc etiam tibi tute interdum dicere possis
'lumina sis oculis etiam bonus Ancu' reliquit

Mar. Junt. vulg. 1005 *circum Cum redeunt*. *victum, Cum redeunt* Lach. without cause. 1009 *congerere* B corr. etc. for *cogere*. 1010 *nulla* Nicc. for *ulla*. After 1011 I believe some verses are lost: both the words of Servius to Aen. VI 596 and his context prove to me that he is speaking of Lucretius, not of Virgil as Bernays affirms in Rhein. Mus. n. f. V p. 584, when he says 'per rotam autem ostendit negotiatores qui semper tempestatibus turbinibusque volvuntur'. I have appended the mark of a hiatus and made no change in the text. *furiae* B corr. Pont. Mar. for *funae*. For *egestas* of all mss. and of Brix. and Ver., Ven. has the remarkable reading *egenus*, adopted by Ald. 1 Junt. Lamb. vulg. Lach.; but it is of course a pure conjecture which Lach. wrongly gives to Marullus. 1013 *Qui neque*. *Quid? neque* Lach. *Haec neque* Mar. Junt. vulg. 1014 *poenarum* Nicc. for *paenarum* of AB: in ancient times there seems to have been a struggle between *paena* and the more correct *poena* which finally prevailed. *paenitet*, or later *penitet*, was alone known. 1016 *iactu' deorsum* Lamb. for *iactus eorum*. *iactu' reorum* Heins. in ms. notes. 1017 *iam mina* AB. *agmina* Nicc. Flor. 31 Brix. Ver. *lamina* Ven. vulg. *lammina* Lach.

1019 *terretque* Lach. for *torretque*. *torquetque* Heins. in ms. notes and advers. which Virg. Aen. VI 670 *sontis...flagello...quatit* might perhaps support.

1023 *Hic*. *Hinc* Pont. Mar. Junt. Lamb. vulg. without cause. 1031 *superare*

qui melior multis quam tu fuit, improbe, rebus.
inde alii multi reges rerumque potentes
occiderunt, magnis qui gentibus imperitarunt.
ille quoque ipse, viam qui quondam per mare magnum
stravit iterque dedit legionibus ire per altum
ac pedibus salsas docuit superare lucunas
et contemsit equis insultans murmura ponti,
lumine adempto animam moribundo corpore fudit.
Scipiadas, belli fulmen, Carthaginis horror,
ossa dedit terrae proinde ac famul infimus esset.
adde repertores doctrinarum atque leporum,
adde Heliconiadum comites; quorum unus Homerus
sceptra potitus eadem aliis sopitu' quietest.
denique Democritum postquam matura vetustas
admonuit memores motus languescere mentis,
sponte sua leto caput obvius optulit ipse.
ipse Epicurus obit decurso lumine vitae,
qui genus humanum ingenio superavit et omnis
restinxit, stellas exortus ut aetherius sol.
tu vero dubitabis et indignabere obire?
mortua cui vita est prope iam vivo atque videnti,
qui somno partem maiorem conteris aevi
et vigilans stertis nec somnia cernere cessas
sollicitamque geris cassa formidine mentem
nec reperire potes tibi quid sit saepe mali, cum
ebrius urgeris multis miser undique curis
atque animi incerto fluitans errore vagaris.'

Si possent homines, proinde ac sentire videntur
pondus inesse animo quod se gravitate fatiget,

Nicc. (not Flor. 31 or Camb.) for *super ire*. Lach. encloses the v. in [ ], as wrongly retained by the first editor. 1032 *equis*. *aquis* Lamb. etc. wrongly.

1033 *fudit* Pont. Mar. Ald. 1 Junt. for *fugit*. 1034 *Scipiadas* AB Lach. *Scipiades* Nicc. vulg. 1038 *potitus* Flor. 31 Camb. Brix. Pont. Mar. for *potius*. 1040 *memores*. *memorem* Lamb. 1042 *obit* Flor. 31 Pont. Mar. for *obiit*. *iit* Lach. *iit* can scarcely be used in this unqualified way for *mortuus est*; nor is the evidence adduced by Lach. in his long and most learned note sufficient to shew that Lucr. could not have used the form *obit* before a consonant: but see notes 2. 1044 *aetherius* Lactantius Junt. *aerius* mss. 1050 *potes tibi quid sit* Lach. for *potest ibi quod sit*. *potes tibi quod sit* Mar. *potes quod sit ibi* Nicc.: hence *potes quid sit tibi* Flor. 31 Camb. Brix. Ver. Ven. Avanc. vulg. *potes quod sit tibi* Junt. Ald. 2 wrongly. 1052 *animi incerto* Lamb. for *animo*

e quibus id fiat causis quoque noscere et unde
tanta mali tamquam moles in pectore constet,
haut ita vitam agerent, ut nunc plerumque videmus
quid sibi quisque velit nescire et quaerere semper
commutare locum quasi onus deponere possit.
exit saepe foras magnis ex aedibus ille,
esse domi quem pertaesumst, subitoque *revertit*,
quippe foris nilo melius qui sentiat esse.
currit agens mannos ad villam praecipitanter,
auxilium tectis quasi ferre ardentibus instans;
oscitat extemplo, tetigit cum limina villae,
aut abit in somnum gravis atque oblivia quaerit,
aut etiam properans urbem petit atque revisit.
hoc se quisque modo fugit (at quem scilicet, ut fit,
effugere haut potis est, ingratis haeret) et odit
propterea, morbi quia causam non tenet aeger;
quam bene si videat, iam rebus quisque relictis
naturam primum studeat cognoscere rerum,
temporis aeterni quoniam, non unius horae,
ambigitur status, in quo sit mortalibus omnis
aetas, post mortem quae restat cumque manenda.

Denique tanto opere in dubiis trepidare periclis
quae mala nos subigit vitai tanta cupido?
certa quidem finis vitae mortalibus adstat
nec devitari letum pote quin obeamus.
praeterea versamur ibidem atque insumus usque
nec nova vivendo proeuditur ulla voluptas;

incerto. 1061 *revertit* added by Politian in marg. Flor. 29 Ald. 1 Junt. vulg. *reventat* Flor. 29 Flor. 31 Camb. Mar. *revertens* Pont. *revisit* Proll, de form. ant. Lucr. p. 44—48. 1063 *praecipitanter* Nicc. for *praecipiter*. 'f. *praecipiterque... instat*' Heins. in ms. notes. 1068 1069: by a better punctuation I have I think made this disputed passage quite clear: 1069 *ingratis* Lamb. rightly for *ingratius*: nothing else is to be changed; but *at quem...haeret* are to be enclosed in brackets. 1068 for *quem* Lach. *quom*: his note is most unsatisfactory and to me almost unintelligible; especially the words 'nam sese homo aut semper effugere potest aut numquam, quoniam hoc totum figurate dicitur'. Seneca de tranquill. II 14 clearly read *quem*: he explains Lucr. quite correctly. *fugit at*. *fugitat* Madvig poet. Lat. carm. sel. 1843: but Seneca, as well as our mss., clearly read *fugit at*. 1069 *haeret et angit* Mar. Junt. Lamb. vulg. For *ingratius* Ven. alone has *initus*; therefore Avanc. who founded his revision on it has *invitus adhaeret*. 1073 *Temporis aeterni* Pont. Mar. Ald. 1 Junt. first for *Aeterni temporis*. 1075 *manenda* Lamb. for *manendo*. 1078 *Certa quidem* Avanc.

sed dum abest quod avemus, id exsuperare videtur
cetera; post aliut, cum contigit illud, avemus
et sitis aequa tenet vitai semper hiantis.
posteraque in dubiost fortunam quam vehat aetas,
quidve ferat nobis casus quive exitus instet.
nec prorsum vitam ducendo demimus hilum
tempore de mortis nec delibare valemus,
quo minus esse diu possimus forte perempti.
proinde licet quot vis vivendo condere saecla;
mors aeterna tamen nilo minus illa manebit,
nec minus ille diu iam non erit, ex hodierno
lumine qui finem vitai fecit, et ille,
mensibus atque annis qui multis occidit ante.

before Lamb. for *Certe equidem*: Lucr. may have written *equidem*. 1085 *fortunam* Ald. 1 Junt. first for *fortuna*. 1088 *delibare* Pont. Mar. Junt. for *deliberare*. *delibrare* Avanc. Lamb. 'f. devitare,' Heins. in ms. notes.
1089 *possimus forte* Nicc. B corr. Flor. 31 Camb. Brix. Ver. Ven. for *possumus forte*. *sorte* Ald. 1 Pius Junt. Naugerius. *morte* Lamb. first: no 'Italus' before him.

T. LUCRETI CARI

DE RERUM NATURA

LIBER QUARTUS

[Avia Pieridum peragro loca nullius ante
trita solo, iuvat integros accedere fontis
atque haurire, iuvatque novos decerpere flores
insignemque meo capiti petere inde coronam
unde prius nulli velarint tempora musae;
primum quod magnis doceo de rebus et artis
religionum animum nodis exsolvere pergo,
deinde quod obscura de re tam lucida pango
carmina, musaeo contingens cuncta lepore.
id quoque enim non ab nulla ratione videtur;
nam veluti pueris absinthia taetra medentes
cum dare conantur, prius oras pocula circum
contingunt mellis dulci flavoque liquore,
ut puerorum aetas inprovida ludificetur
labrorum tenus, interea perpotet amarum
absinthi laticem deceptaque non capiatur,
sed potius tali pacto recreata valescat,
sic ego nunc, quoniam haec ratio plerumque videtur
tristior esse quibus non est tractata, retroque
volgus abhorret ab hac, volui tibi suaviloquenti
carmine Pierio rationem exponere nostram

7 *animum*. *animos* Lactant. I 16: see I 932. 8 *pango* Flor. 31 Camb. 3 Vat. vulg. for *pando*: so I 933. 11 *Nam*. *Ac* Quintil. III 1 4 Nonius Hieronym. 13 *Contingunt*. *Inspirant* or *Aspergunt* Quintil. 17 *pacto* Lach. for *atacto*: so I 942. *a tactu* Nicc. one Vat. Ver. Ven. Ald. 1 Junt. Wak. *attactu* Flor. 31 3 Vat. *adtactu* Camb. *tactu* Lamb. ed. 3. *facto* Lamb. ed. 1 and 2,

et quasi musaeo dulci contingere melle,
si tibi forte animum tali ratione tenere
versibus in nostris possem, dum percipis omnem
naturam rerum ac persentis utilitatem.]

Atque animi quoniam docui natura quid esset
et quibus e rebus cum corpore compta vigeret
quove modo distracta rediret in ordia prima,
nunc agere incipiam tibi, quod vementer ad has res
attinet, esse ea quae rerum simulacra vocamus:
quae, quasi membranae summo de corpore rerum
dereptae, volitant ultroque citroque per auras,
atque eadem nobis vigilantibus obvia mentes
terrificant atque in somnis, cum saepe figuras
contuimur miras simulacraque luce carentum,
quae nos horrifice languentis saepe sopore
excierunt: ne forte animas Acherunte reamur
effugere aut umbras inter vivos volitare
neve aliquid nostri post mortem posse relinqui,
cum corpus simul atque animi natura perempta
in sua discessum dederint primordia quaeque.

Dico igitur rerum effigias tenuisque figuras
mittier ab rebus summo de corpore rerum,
51 quoi quasi membranae, vel cortex nominitandast,
quod speciem ac formam similem gerit eius imago

Gif. 32 *dereptae* B Lamb. *direptae* A Nicc. all before Lamb. 41 *quaeque. quoique* Lach. '*discessus*' he says 'non aliter dari potest quam quomodo *fugam dari* Vergilius dixit, id est concedi': but Virgil also says XII 367 *fugam dant nubila*, that is *fugiunt*: see notes 2 for many more illustrations: *discessum dederint* therefore = *discesserint*. 42 *effigias* Lamb. for *effugias* of AB. *effigies* Nicc. and all mss. and eds. between him and Lamb. 43 *summo de corpore rerum* Lach. for *summo de cortice eorum*. *summo de corpore earum* Lamb. vulg.: but comp. 31 and 64, and Lachmann's note. 44—47 (45—48) = III 31—34, except 44 *Sed quoniam* for *Et quoniam*, 47 *Quoque*, *possit* for *Quove*, *possint*, and are rightly ejected by Lach. as a gloss. In this place they are of course quite inadmissible. Mar. Junt. vulg. put them before 26; and thither, if retained, they must be transferred. To this Lach. offers the objection that while the first 24 lines are repeated word for word from the first book, in 25 we have *ac persentis utilitatem* for *qua constet compta figura*: this change he says was probably made because in 27 are the words *compta vigeret*; but had the poet really inserted 44—47 before 26, this alteration would not have been called for: see however what is said in notes 2. 48 49 (49 50) = 29 30 and seem to be repeated here without meaning because of the resemblance between what precedes and follows them there and

cuiuscumque cluet de corpore fusa vagari.
44 id licet hinc quamvis hebeti cognoscere corde.
54 principio quoniam mittunt in rebus apertis
corpora res multae, partim diffusa solute,
robora ceu fumum mittunt ignesque vaporem,
et partim contexta magis condensaque, ut olim
cum teretis ponunt tunicas aestate cicadae,
et vituli cum membranas de corpore summo
nascentes mittunt, et item cum lubrica serpens
exuit in spinis vestem; nam saepe videmus
illorum spoliis vepres volitantibus auctas:
quae quoniam fiunt, tenuis quoque debet imago
ab rebus mitti summo de corpore rerum.
nam cur illa cadant magis ab rebusque recedant
quam quae tenvia sunt, hiscendist nulla potestas;
praesertim cum sint in summis corpora rebus
multa minuta, iaci quae possint ordine eodem
quo fuerint et formai servare figuram,
et multo citius, quanto minus indupediri
pauca queunt et *quae* sunt prima fronte locata.
nam certe iacere ac largiri multa videmus,
non solum ex alto penitusque, ut diximus ante,
verum de summis ipsum quoque saepe colorem.
et volgo faciunt id lutea russaque vela
et ferrugina, cum magnis intenta theatris
per malos volgata trabesque trementia flutant;
namque ibi consessum caveai supter et omnem

what precedes and follows here. Mar. and Junt. first omitted them. 50 *Quoi* Ed. for *Qui*. *Quae* Nonius Flor. 31 Camb. vulgo and Lach. 52 *cluet* Brix. Avanc. Ald. 2 for *ciuet. cui et* Nicc, *tui et* Flor. 31 Camb. *eluet* Ver. Ven. *queat* Mar. Junt. 53 (44) first transferred hither by Mar. Junt. 54 *mittunt* Nicc. for *mittuntur*. 68 *eodem* Pont. Mar. Junt. for *eorum*. *rerum* Ven. Avanc. 69 *et formai* Is. Voss. in ms. notes for *et forma*. *et cum forma* B corr. *veterem et formam* Camb. *veterem et formae* Vat. 1136 and 1954 Othob. Lamb. *solitam et formae* Avanc. Nauger. *formaeque suam* Pont. Junt. *conformem* or *consimilem* conj. Lamb. *conformem* Heins. in ms. notes. 71 *et quae sunt prima* Lach. for *et sunt prima* AB. 'quadratus habet *in* ante *prima* additum antiquissima, si non prima manu' Lach.: and so Pont. Mar. Ald. 1 Junt. *et sunt prima sub* Flor. 31 Camb. 72 *iacere ac largiri* Lach. most acutely for *iacere aciergiri*. *iacere ac iaculari* Flor. 31 Camb. 2 Vat. Mar. Ald. 1 Junt. 77 *flutant* Turnebus Lamb. ed. 3 for *fluctus* B. om. A Nicc. 2 Vat. Brix. Ver.: hence *circum*, *pendent*,

scaenai speciem, patrum coetumque decorum
inficiunt coguntque suo fluitare colore.
et quanto circum mage sunt inclusa theatri
moenibu', tam magis haec intus perfusa lepore
omnia conrident correpta luce diei.
ergo lintea de summo cum corpore fucum
mittunt, effigias quoque debent mittere tenvis
res quaeque, ex summo quoniam iaculantur utraque.
sunt igitur iam formarum vestigia certa
quae volgo volitant suptili praedita filo
nec singillatim possunt secreta videri.
praeterea omnis odor fumus vapor atque aliae res
consimiles ideo diffusae *e* rebus abundant,
ex alto quia dum veniunt intrinsecus ortae,
scinduntur per iter flexum, nec recta viarum
ostia sunt qua contendant exire coortae.
at contra tenuis summi membrana coloris
cum iacitur, nil est quod eam discerpere possit,
in promptu quoniam est in prima fronte locata.
postremo speculis in aqua splendoreque in omni
quaecumque apparent nobis simulacra, necessest,
quandoquidem simili specie sunt praedita rerum
ex*tima,* imaginibus missis consistere rerum.

duras in various mss. and eds. 79 *Scaenai* Lamb. first for *Scaenal* A, *Scaenali* B. *Scaenalem* A corr. Nicc. all mss. and eds. between him and Lamb. ***patrum coetumque decorum*** Ed. for *patrum matrumque deorum.* *patrum matrumque deorumque* Nicc. all before Lach. *pulcram variumque decorem* Lach. *claram variamque deorsum* Bern. But comp. Aen. v 340, Tac. ann. xiii 54 and Camb. Journ. of phil. i 373. Lucr. often has *que* in the third place: comp. 104, and see notes 2 to ii 1050. ***patrum*** and ***decorum*** seem to me pretty certain: for *coetumque* perhaps *ornatumque* or the like. 81 *inclusa theatri Moenibu'* Ed. for *inclusa* (B, *inclaustra* A Nicc.) *theatri Moenia*: a necessary and simple correction: *Moenia* has arisen from the neighbouring *inclusa, haec, perfusa*: so ii 458 *omnia* for *omnibu'*, 919 *animalibu'* for *animalia.* *inclusa theatri Moenia*, the vulg. reading, has no sense. *angusta theatri Moenia* Lach. which is contrary to the truth. 91 *diffusae rebus* AB. Lamb. has rightly added *e*; and 92 he has also rightly given *intrinsecus* for *extrinsecus*: so vi 1099 *intrinsecus* A for *extrinsecus.* 94 *coorte* B, i.e. *coortae;* and so Lamb. ed. 3. *coorta* A. *qua contendant* AB most properly. *qua contendunt* Nicc. and all mss. and eds. between him and Lach.: 91 *diffusa e*, 92 *extrinsecu' torte*, 94 *coorta* Lach. whose explanation is most forced. 101 *Extima, imaginibus* Ed. for *Ex imaginibus*: the scribe neglected to repeat the *ima.* *Excita imaginibus* Lach. *Esse in imaginibus* Avanc. Nauger. Lamb. vulg. without meaning. *Esse et* Mar. Junt. *rerum* Lach. for *eorum*, as in 43. *earum*

sunt igitur tenues formae, rerum similesque
effigiae, singillatim quas cernere nemo
cum possit tamen, adsiduo crebroque repulsu
reiectae reddunt speculorum ex aequore visum,
nec ratione alia servari posse videntur,
tanto opere ut similes reddantur cuique figurae.
  Nunc age quam tenui natura constet imago
percipe. et in primis, quoniam primordia tantum
sunt infra nostros sensus tantoque minora
quam quae primum oculi coeptant non posse tueri,
nunc tamen id quoque uti confirmem, exordia rerum
cunctarum quam sint suptilia percipe paucis.
primum animalia sunt iam partim tantula, quorum
tertia pars nulla possit ratione videri.
horum intestinum quodvis quale esse putandumst!
quid cordis globus aut oculi? quid membra? quid artus?
quantula sunt! quid praeterea primordia quaeque
unde anima atque animi constet natura necessumst?
nonne vides quam sint subtilia quamque minuta?
praeterea quaecumque suo de corpore odorem
expirant acrem, panaces absinthia taetra

Mar. Junt. 102 103 = 65 66. 104 *formae rerum similesque* Ed. for *formarum dissimilesque*: comp. Camb. Journ. of phil. i p. 43; I have since learnt that Hugo Purmann hit upon the same correction before me: *dissimilesque* was written merely to fill up the verse. *formarum illis similesque* Lach. *formarum consimilesque* Lamb. vulg. 116 *quorum* H. Purmann Lucr. quaest. p. 27, *corum* Lach. for *eorum.* *eorum ut* Camb. Vat. 1136 Othob. Mar. Junt. *ut horum* Vat. 3276 Pont. Nauger. *eorum...nulla ut possit* Avanc. After 126 not a few vss. must have been lost. Heins. in ms. notes says 'aliquid deest': Haverc. suspected the same. Lach. by an elaborate and acute calculation shews or endeavours to shew that one page of the archetype containing 25 lines and one heading, *Esse item maiora*, has been lost. That a page of the archetype ended with 126 is certain; that another page commenced with 127, and that this page was a left-hand or even-numbered page is no less certain, as Lach. has demonstrated. It is also perhaps more probable that 25 lines were here lost, than double that number or more, because the poet in 115 says, as Lach. points out, *percipe paucis.* But Lachmann's calculation, taken in conjunction with his general theory of the mode in which AB and the other mss. descended from the archetype, involves a great difficulty which is discussed above p. 27, 28. Lach. thus continues the sentence of 126 *duobus* [*Attingas digitis*]: Haverc. [*Contrectes digitis*]. Among the lost verses Lach. places this fragment, *qui fulmine claro Omnia per sonitus arcet, terram mare caelum*: which I believe belongs to Ennius, not to Lucr. at all, as it has nothing of his style about it; and Servius Aen. i 30 assigns it distinctly to the former, while the words of

habrotonique graves et tristia centaurea,
quorum unum quidvis leviter si forte duobus

*

quin potius noscas rerum simulacra vagari
multa modis multis nulla vi cassaque sensu?
[Sed ne forte putes ea demum sola vagari,
quaecumque ab rebus rerum simulacra recedunt,
sunt etiam quae sponte sua gignuntur et ipsa
constituuntur in hoc caelo qui dicitur aer,
135 quae multis formata modis sublime feruntur
141 nec speciem mutare suam liquentia cessant
et cuiusque modi formarum vertere in oras;
133 ut nubes facile interdum concrescere in alto
cernimus et mundi speciem violare serenam
136 aera mulcentes motu. nam saepe Gigantum
ora volare videntur et umbram ducere late,
interdum magni montes avolsaque saxa
montibus anteire et solem succedere praeter,
140 inde alios trahere atque inducere belua nimbos.]
143 Nunc ea quam facili et celeri ratione genantur
perpetuoque fluant ab rebus lapsaque cedant

. . . .

semper enim summum quicquid de rebus abundat
quod iaculentur. et hoc alias cum pervenit in res,
transit, ut in primis vitrum. sed ubi aspera saxa
aut in materiam ligni pervenit, ibi iam
scinditur ut nullum simulacrum reddere possit.
at cum splendida quae constant opposta fuerunt
densaque, ut in primis speculum est, nil accidit horum;

Probus to ecl. VI 31 are ambiguous. 129—142, strangely transposed in the mss. as may be seen by our left-hand numbering, were first brought into order by the acuteness of Lamb.: see above p. 30 for a possible explanation of this disorder. 138 *motu. nam.* *motum in* Nicc. the cause of great confusion in later mss. and eds. before Mar. Junt. and Lamb. 143 *genantur* Lamb. for *gerantur*: a necessary change here, though he often introduces the word without cause.

After 144 a verse has manifestly been lost: it is curious that Marullus and Lamb. should have overlooked this. 'deest *Percipe* vel *Expediam*, tum paucula a quibus illud *enim* quod subicitur pendeat' Lach. 147 and 152 *vitrum* Oppenrieder for *vestem*: a necessary correction which it is strange neither Lamb. nor Lach. should have made: Lamb. indeed sees the difficulty involved in *vestem*, Lach. does not: comp.

nam neque, uti vitrum, potis est transire, neque autem
scindi; quam meminit levor praestare salutem.
quapropter fit ut hinc nobis simulacra redundent.
et quamvis subito quovis in tempore quamque
rem contra speculum ponas, apparet imago;
perpetuo fluere ut noscas e corpore summo
texturas rerum tenuis tenuisque figuras.
ergo multa brevi spatio simulacra genuntur,
ut merito celer his rebus dicatur origo.
et quasi multa brevi spatio summittere debet
lumina sol ut perpetuo sint omnia plena,
sic ab rebus item simili ratione necessest
temporis in puncto rerum simulacra ferantur
multa modis multis in cunctas undique partis;
quandoquidem speculum quocumque obvertimus oris,
res ibi respondent simili forma atque colore.
praeterea modo cum fuerit liquidissima caeli
tempestas, perquam subito fit turbida foede,
undique uti tenebras omnis Acherunta rearis
liquisse et magnas caeli complesse cavernas.
usque adeo taetra nimborum nocte coorta
inpendent atrae formidinis ora superne;
quorum quantula pars sit imago dicere nemost
qui possit neque eam rationem reddere dictis.
Nunc age, quam celeri motu simulacra ferantur
et quae mobilitas ollis tranantibus auras
reddita sit, longo spatio ut brevis hora teratur,
in quem quaeque locum diverso numine tendunt,
suavidicis potius quam multis versibus edam;
parvus ut est cycni melior canor, ille gruum quam
clamor in aetheriis dispersus nubibus austri.
principio persaepe levis res atque minutis
corporibus factas celeris licet esse videre.

602. 152 *potis est* Lach. for *possunt.* *autem. ante* Mon. Ven. and hence Avanc. Junt. and all eds. before Lach. 159 *genuntur* Lamb. for *geruntur*: here too a necessary correction. 167 *Res ibi* A and most mss. and eds. *Res sibi* B Camb. Ven. which Lach. thinks 'unice verum'. *Res tibi* Gif. 178 *teratur* Pont. Junt. most properly for *feratur.* 179 *tendunt* Lamb. for *tendit.* Lach. puts this verse after 175, reading *tendat*, and *momine* for *numine* with Mar. Junt., a change which I am now not inclined to acquiesce in: see II 632, and Epicurus

in quo iam genere est solis lux et vapor eius
propterea quia sunt e primis facta minutis
quae quasi cuduntur perque aeris intervallum
non dubitant transire sequenti concita plaga.
suppeditatur enim confestim lumine lumen
et quasi protelo stimulatur fulgere fulgur.
quapropter simulacra pari ratione necesse est
inmemorabile per spatium transcurrere posse
temporis in puncto, primum quod parvola causa
est procul a tergo quae provehat atque propellat,
quod superest, ubi tam volucri levitate ferantur;
deinde quod usque adeo textura praedita rara
mittuntur, facile ut quasvis penetrare queant res
et quasi permanare per aeris intervallum.
praeterea si, quae penitus corpuscula rerum
ex altoque foras mittuntur, solis uti lux
ac vapor, haec puncto cernuntur lapsa diei
per totum caeli spatium diffundere sese
perque volare mare ac terras caelumque rigare,
quid quae sunt igitur iam prima fronte parata,
cum iaciuntur et emissum res nulla moratur?
quone vides citius debere et longius ire
multiplexque loci spatium transcurrere eodem
tempore quo solis pervolgant lumina caelum?
hoc etiam in primis specimen verum esse videtur
quam celeri motu rerum simulacra ferantur,
quod simul ac primum sub diu splendor aquai
ponitur, extemplo caelo stellante serena
sidera respondent in aqua radiantia mundi.
iamne vides igitur quam puncto tempore imago
aetheris ex oris in terrarum accidat oras?
quare etiam atque etiam mira fateare necessest

cited in notes 2. 190 *fulgere* AB Nicc. Flor. 31 Camb. Mon. 3 Vat. *fulgure* 2 Vat. Brix. Ven. Mar. eds. before Lach. 195 Lach. places after 205: I wrongly followed him formerly. 199 203 in my small ed. I allowed by accident Lachmann's punctuation to stand: of course there should be a comma after *si* and after 203, the apodosis beginning at *Quid quae.* 203 *caelum. circum* Lach.

206 *Quone. Nonne* B corr. Pont. Mar. vulg. 211 *diu* AB Nicc. *divo* vulg. before Lach. 213 *mundi. mundo* Lach. but here, as I 1060 and IV 418, he seems not to feel that Lucr. calls the reflected image a *mundus*: a quite natural notion.

. . . .
corpora quae feriant oculos visumque lacessant.
perpetuoque fluunt certis ab rebus odores;
frigus ut a fluviis, calor ab sole, aestus ab undis
aequoris exesor moerorum litora circum.
nec variae cessant voces volitare per auras.
denique in os salsi venit umor saepe saporis,
cum mare versamur propter, dilutaque contra
cum tuimur misceri absinthia, tangit amaror.
usque adeo omnibus ab rebus res quaeque fluenter
fertur et in cunctas dimittitur undique partis
nec mora nec requies interdatur ulla fluendi,
perpetuo quoniam sentimus, et omnia semper
cernere odorari licet et sentire sonare.
  Praeterea quoniam manibus tractata figura
in tenebris quaedam cognoscitur esse eadem quae
cernitur in luce et claro candore, necessest
consimili causa tactum visumque moveri.
nunc igitur si quadratum temptamus et id nos
commovet in tenebris, in luci quae poterit res
accidere ad speciem quadrata, nisi eius imago?
esse in imaginibus quapropter causa videtur
cernundi neque posse sine his res ulla videri.
nunc ea quae dico rerum simulacra feruntur
undique et in cunctas iaciuntur didita partis;
verum nos oculis quia solis cernere quimus,
propterea fit uti, speciem quo vertimus, omnes
res ibi eam contra feriant forma atque colore.
et quantum quaeque ab nobis res absit, imago

216 *mira. mitti* Lach.; but Lucr. is here speaking not simply of the emission of images, but of their enormous velocity. I therefore keep *mira*, and suppose with Purmann Jahn's Jahrb. vol. 67 p. 676 and Goebel obs. Lucret. p. 25 that a verse is lost. 218 *fluunt* Lamb. rightly, as VI 924, for *fluant*. This and the ten following verses, which are repeated in the sixth book, were undoubtedly read in the fourth by Gellius and Nonius. There is no question therefore that Lucr. or his editor placed them here; there is just as little question that they are much more appropriate in VI than here. [219 *ut.* See n. to VI 925.] 229 is ejected by Lach. here and in the sixth book: it must I think be retained in both places; for to say that we always perceive all things is a simple absurdity: we always have sensation, and may at any time, *if we please*, exert the sense of sight smell hearing: again *Perpetuo...et omnia semper* would be an intolerable tautology. 240 *didita* Pont. Mar. Ald. 1 Junt.

efficit ut videamus et internoscere curat;
nam cum mittitur, extemplo protrudit agitque
aera qui inter se cumque est oculosque locatus,
isque ita per nostras acies perlabitur omnis
et quasi perterget pupillas atque ita transit.
251 propterea fit uti videamus quam procul absit
250 res quaeque. et quanto plus aeris ante agitatur
et nostros oculos perterget longior aura,
tam procul esse magis res quaeque remota videtur.
scilicet haec summe celeri ratione geruntur,
quale sit ut videamus et una quam procul absit.
illud in his rebus minime mirabile habendumst,
cur, ea quae feriant oculos simulacra videri
singula cum nequeant, res ipsae perspiciantur.
ventus enim quoque paulatim cum verberat et cum
261 acre fluit frigus, non privam quamque solemus
260 particulam venti sentire et frigoris eius,
sed magis unorsum, fierique perinde videmus
corpore tum plagas in nostro tamquam aliquae res
verberet atque sui det sensum corporis extra.
praeterea lapidem digito cum tundimus, ipsum
tangimus extremum saxi summumque colorem,
nec sentimus eum tactu, verum magis ipsam
duritiem penitus saxi sentimus in alto.
  Nunc age, cur ultra speculum videatur imago
percipe; nam certe penitus semota videtur.
quod genus illa foris quae vere transpiciuntur,
ianua cum per se transpectum praebet apertum,
multa facitque foris ex aedibus ut videantur.
is quoque enim duplici geminoque fit aere visus.

for *dedita*. 245 *curat*. *cogit* Lach. because, with *curat*, *internoscere* would stand he says for an accusative, and in that case Lucr. would make it govern another accusative, though he allows that Ennius does not observe such a law, as in *audere repressit*: a somewhat far-fetched distinction: see notes 2. 246 *protrudit* Lamb. for *protudit*: so 280 *procudit* Flor. 31 Camb. etc. Flor. 29 reads with Nicc. *protulit*: Politian in marg. has *protudit* (with *c* written above); in 187 he wrote *tr*. over the *c* of *cuduntur*. 250 and 251, 260 and 261: Mar. Ald. 1 Junt. first have these verses in their right order. 260 *privam* Gif. for *primam*; 'ex v. c.' he says. 267 *ipsam* Nicc. B corr. for *ipsa*. 270 *semota* Mar. Ald. 1 Junt. for *remota*: so 288. *remmota* B, which may be right. 271 and 278 *quae vere transpiciuntur*. Lach. possessed by his theory of *quod genus* (see II 194) without any autnority reads

primus enim citra postes tum cernitur aer,
inde fores ipsae dextra laevaque secuntur,
post extraria lux oculos perterget et aer
alter et illa foris quae vere transpiciuntur.
sic ubi se primum speculi proiecit imago,
dum venit ad nostras acies, protrudit agitque
aera qui inter se cumquest oculosque locatus,
et facit ut prius hunc omnem sentire queamus
quam speculum. sed ubi speculum quoque sensimus ipsum,
continuo a nobis in *id*em quae fertur imago
pervenit et nostros oculos reiecta revisit
atque alium prae se propellens aera volvit
et facit ut prius hunc quam se videamus, eoque
distare ab speculo tantum semota videtur.
quare etiam atque etiam minime mirarier est par,
illic quor reddant speculorum ex aequore visum,
aeribus binis quoniam res confit utraque.
nunc ea quae nobis membrorum dextera pars est,
in speculis fit ut in laeva videatur eo quod
planitiem ad speculi veniens cum offendit imago,
non convertitur incolumis, sed recta retrorsum
sic eliditur, ut siquis, prius arida quam sit
cretea persona, adlidat pilaeve trabive,
atque ea continuo rectam si fronte figuram
323 servet et *e*lisam retro sese exprimat ipsa.

sunt, *bene* for *vere*, and ruins the argument. 275 *tum cernitur*. *cum* Nicc. Flor. 31 Camb. etc. which has caused much confusion in the eds. before Lach.

277 *perterget* Lamb. first for *perteget*: (so *perteget* AB in 249; but there *perterget* Nicc.) *pertinget* Nicc. and so all before Lamb. 283 *ubi speculum* Mar. Junt. for *ubi in speculum*. 284 *in idem* Ed. for *in eum*: *id* was absorbed by *in*, and *em* was then changed to *eum*: *in* was lost after *id* in IV 1037. *iterum* Lach.

290 *Illic quor reddant* Ed. for *Illis quae reddunt*. Lach. puts this verse after 270, where it is quite out of place: from 107 it is manifest that the images, not the real things, 'reddunt speculorum ex aequore visum'. Lamb. and Creech think 289—291 spurious: Wak. as usual sees no difficulty in the ms. reading and boldly calls in the Pythagoreans to the rescue. 299—347 (323—347 299—322) were first placed in their proper order by Lamb. after B corr. This is one of the main passages which enabled Lach. so acutely to determine the number of lines in a page of the lost archetype of all our mss. These 49 verses + three headings amount to fifty-two or twice twenty-six; that is to say the original ms. had twenty-six lines in a page, and by some chance one leaf, the 76th, had its pages inverted; hence the transposition: see introduction p. 27. The marg. of Flor. 29 in the writing of

fiet ita, ante oculus fuerit qui dexter, ut idem
nunc sit laevus, et e laevo sit mutua dexter.
fit quoque de speculo in speculum ut tradatur imago,
quinque etiam sex*ve* ut fieri simulacra suërint.
nam quaecumque retro parte interiore latebunt,
inde tamen, quamvis torte penitusque remota,
omnia per flexos aditus educta licebit
pluribus haec speculis videantur in aedibus esse.
usque adeo speculo in speculum translucet imago,
et cum laeva data est, fit rusum ut dextera fiat,
inde retro rursum redit et convertitur eodem.
quin etiam quaecumque latuscula sunt speculorum
adsimili lateris flexura praedita nostri,
dextera ea propter nobis simulacra remittunt,
aut quia de speculo in speculum transfertur imago,
inde ad nos elisa bis advolat, aut etiam quod
circum agitur, cum venit, imago propterea quod
flexa figura docet speculi convertier ad nos.
indugredi porro pariter simulacra pedemque
ponere nobiscum credas gestumque imitari
propterea quia, de speculi qua parte recedas,
continuo nequeunt illinc simulacra reverti;
omnia quandoquidem cogit natura referri
ac resilire ab rebus ad aequos reddita flexus.
299 Splendida porro oculi fugitant vitantque tueri.
sol etiam caecat, contra si tendere pergas,
propterea quia vis magnast ipsius et alte
aera per purum graviter simulacra feruntur
et feriunt oculos turbantia compposituras.
praeterea splendor quicumque est acer adurit
saepe oculos ideo quod semina possidet ignis
multa, dolorem oculis quae gignunt insinuando.

Politian apparently, and Mar. give the same order as the Junt. viz. 298 323—325 299—322 348—352 326—341 353—363 342—347 364 of the ms. order, or that on the left of my edition. 299 *et elisam* B corr. Flor. 31 Camb. for *et lisam.* 300 *Fiet ita, ante* Lach. for *Fiet ut ante.* *Fiet ut...hic idem* Mar. Ald. 1 Junt. 303 *sexve* Mar. Junt. for *sex.* *aut sex* Lach. 304 *latebunt* Mar. Ald. 1 Junt. for *latebit.* 310 *convertitur* Lach. for *convertit*: see 295 and 317. *retrorsum* A corr. B for *retro rursum* has caused much confusion in old eds. 318 *porro pariter* A Nicc. Flor. 31 Camb. etc. *pariter porro* B. Mon. 321 *nequeunt.* *nequeant* A

lurida praeterea fiunt quaecumque tuentur
arquati, quia luroris de corpore eorum
semina multa fluunt simulacris obvia rerum,
multaque sunt oculis in eorum denique mixta,
quae contage sua palloribus omnia pingunt.
e tenebris autem quae sunt in luce tuemur
propterea quia, cum propior caliginis aer
ater init oculos prior et possedit apertos,
insequitur candens confestim lucidus aer
qui quasi purgat eos ac nigras discutit umbras
aeris illius; nam multis partibus hic est
mobilior multisque minutior et mage pollens.
qui simul atque vias oculorum luce replevit
atque patefecit quas ante obsederat aer
ater, continuo rerum simulacra secuntur
quae sita sunt in luce, lacessuntque ut videamus.
348 quod contra facere in tenebris e luce nequimus
propterea quia posterior caliginis aer
crassior insequitur qui cuncta foramina complet
obsiditque vias oculorum, ne simulacra
possint ullarum rerum coniecta movere.
quadratasque procul turris cum cernimus urbis,
propterea fit uti videantur saepe rutundae,
angulus optusus quia longe cernitur omnis
sive etiam potius non cernitur ac perit eius
plaga nec ad nostras acies perlabitur ictus,
aera per multum quia dum simulacra feruntur,
cogit hebescere eum crebris offensibus aer.
hoc ubi suffugit sensum simul angulus omnis,
fit quasi ut ad tornum saxorum structa terantur;
non tamen ut coram quae sunt vereque rutunda,

Nicc. wrongly. 342 *illius* Flor. 31 Camb. Ver. Ven. Mar. for *ullius.* 345 346 *aer Ater* Bern. for *Ater.* *ater, Aera* Lach. *ater Continuo r. s. adaperta s.* Flor. 31 Camb. vulg. without meaning. 351 *que vias* B corr. Flor. 31 Camb. Mar. for *quia.* 352 *coniecta* Mar. Ald. 1 Junt. for *contecta.* *movere* Bentl. rightly for *moveri.* 357 *acies* Nicc. B corr. for *ates.* *perlabitur* Lamb. ed. 3 first for *deriabitur*; from whom Gif. ed. 2 took it without acknowledgment. *derivabitur* Nicc. *delabitur* Avanc. *illabitur* Mar. Junt. *adlabitur* Lamb. ed. 1 and 2. *arlabitur* Gif. ed. 1. 361 *tornum* Flor. 31 2 Vat. Brix. Mar. for *turnum.* *tortum* Camb. *terantur* Ed. for *tuantur.* *tuamur* Lach., but *ad tornum* has no sense or construction with *tuantur* or *tuamur*, as Lamb. saw, who reads *tornata ut* for *ad*

sed quasi adumbratim paulum simulata videntur.
umbra videtur item nobis in sole moveri
et vestigia nostra sequi gestumque imitari;
aera si credis privatum lumine posse
indugredi, motus hominum gestumque sequentem;
nam nil esse potest aliut nisi lumine cassus
aer id quod nos umbram perhibere suēmus.
nimirum quia terra locis ex ordine certis
lumine privatur solis quacumque meantes
officimus, repletur item quod liquimus eius,
propterea fit uti videatur, quae fuit umbra
corporis, e regione eadem nos usque secuta.
semper enim nova se radiorum lumina fundunt
primaque dispereunt, quasi in ignem lana trahatur.
propterea facile et spoliatur lumine terra
et repletur item nigrasque sibi abluit umbras.
Nec tamen hic oculos falli concedimus hilum.
nam quocumque loco sit lux atque umbra tueri
illorum est; eadem vero sint lumina necne,
umbraque quae fuit hic eadem nunc transeat illuc,
an potius fiat paulo quod diximus ante,
hoc animi demum ratio discernere debet,
nec possunt oculi naturam noscere rerum.
proinde animi vitium hoc oculis adfingere noli.
qua vehimur navi, fertur, cum stare videtur;
quae manet in statione, ea praeter creditur ire.
et fugere ad puppim colles campique videntur
quos agimus praeter navem velisque volamus.
sidera cessare aetheriis adfixa cavernis
cuncta videntur, et adsiduo sunt omnia motu,
quandoquidem longos obitus exorta revisunt,
cum permensa suo sunt caelum corpore claro.
solque pari ratione manere et luna videntur
in statione, ea quae ferri res indicat ipsa.
exstantisque procul medio de gurgite montis
classibus inter quos liber patet exitus ingens,

tornum, a violent change. 378 *abluit* Ver. Ven. Mar. for *adluit*. 395 *videntur* Lach. for *videtur*, as plur. *ea* follows. In small ed. I thought that after 397 a verse was lost of this nature, *Fallere saepe animum simili ratione videmus*;

insula coniunctis tamen ex his una videtur.
atria versari et circumcursare columnae
usque adeo fit uti pueris videantur, ubi ipsi
desierunt verti, vix ut iam credere possint
non supra sese ruere omnia tecta minari.
iamque rubrum tremulis iubar ignibus erigere alte
cum coeptat natura supraque extollere montes,
quos tibi tum supra sol montis esse videtur
comminus ipse suo contingens fervidus igni,
vix absunt nobis missus bis mille sagittae,
vix etiam cursus quingentos saepe veruti:
inter eos solemque iacent immania ponti
aequora substrata aetheriis ingentibus oris,
interiectaque sunt terrarum milia multa
quae variae retinent gentes et saecla ferarum.
at conlectus aquae digitum non altior unum,
qui lapides inter sistit per strata viarum,
despectum praebet sub terras inpete tanto,
a terris quantum caeli patet altus hiatus;
nubila dispicere et †caelum ut videare videre
corpora mirando sub terras abdita caelo.
denique ubi in medio nobis ecus acer obhaesit

but see notes 2. Lach. reads *Exstant usque* for *Exstantisque*. 406 *tibi tum* Nauger. first for *ubi tum*. 414 *conlectus* Lamb. for *coniectus*: see III 198. 418 A has properly *ut* before *videare*: *caelum* appears to have come from *caeli* of 417 or *caelo* of 419: see notes 2: Flor. 31 has *mirando*; Nicc. Camb. etc. *miranda*. Lach. seems to have misapprehended the matter, as in 213 and I 1061: he reads *Ut prope miraclo* for *Corpora mirande*, *caeli* for *caelo*, and transposes the two verses. But I have obeyed him in reading *dispicere* for *despicere*, as ms. authority is of little weight on such a point: comp. 421 *dispeximus* AB Nicc. for *desp.* Virgil's mss. both in Aen. I 224 and georg. II 187 are nearly all in favour of *despicere*. Ph. Wagner philologus XV p. 352 quotes on the side of *despicere* Quintil. inst. VI prooem. 4 'nullam terras *despicere* providentiam', but on referring to Zumpt ed. Spald. suppl. annot. I find that the best ms. Ambros. 1, and Turic. p. m. have *nulla in terras despicere*, another *terras dispicere*: this passage therefore will not refute Lachmann's position that *dispicere nubila* or *despicere in nubila* is 'to look upon the clouds', *despicere nubila* 'to despise the clouds': comp. for the former sense III 26 *quin omnia dispiciantur*; IV 421 *in rapidas amnis despeximus undas*; for the latter II 9 *Despicere unde queas alios*. AB on the whole support this distinction. Conington to Virgil l. l. keeps *despicere*; and Aen. I 224 he says that the reason for the distinction fails completely: but surely the fact that the personal passive *despicior* and the participle *despectus* always have the sense of being despised

flumine et in rapidas amnis despeximus undas,
stantis equi corpus transversum ferre videtur
vis et in adversum flumen contrudere raptim,
et quocumque oculos traiecimus omnia ferri
et fluere adsimili nobis ratione videntur.
porticus aequali quamvis est denique ductu
stansque in perpetuum paribus suffulta columnis,
longa tamen parte ab summa cum tota videtur,
paulatim trahit angusti fastigia coni,
tecta solo iungens atque omnia dextera laevis
donec in obscurum coni conduxit acumen.
in pelago nautis ex undis ortus in undis
sol fit uti videatur obire et condere lumen;
quippe ubi nil aliud nisi aquam caelumque tuentur;
ne leviter credas labefactari undique sensus.
at maris ignaris in portu clauda videntur
navigia aplustris fractis obnitier undae.
nam quaecumque supra rorem salis edita pars est
remorum, recta est, et recta superne guberna:
quae demersa liquorem obeunt, refracta videntur
omnia converti sursumque supina reverti
et reflexa prope in summo fluitare liquore.
raraque per caelum cum venti nubila portant
tempore nocturno, tum splendida signa videntur
labier adversum nimbos atque ire superne
longe aliam in partem ac *vera* ratione feruntur.
at si forte oculo manus uni subdita supter
pressit eum, quodam sensu fit uti videantur
omnia quae tuimur fieri tum bina tuendo,
bina lucernarum florentia lumina flammis
binaque per totas aedis geminare supellex
et duplicis hominum facies et corpora bina.

is some reason: to me indeed it is a conclusive one. Lamb. reads *videre et Corpora mirando s. t. a. c.* but in ed. 3 he obelises *et* and the following verse. 421 *despeximus* Flor. 31 Camb. Ver. Ven. Mar. for *dispeximus*. 436 *At maris* Nicc. B. corr. for *Amaris*. 437 *fractis* Flor. 31 Mar. for *factas*. *undae* Lach. for *undas*. *undis* vulg. 440 *liquorem* Lach. for *liquore*. 446 *ac vera ratione* Is. Voss. in ms. notes for *aque ratione*: the scribe wrote *ra* only once: 'quidam codices' says Creech: that is he had heard indirectly of Vossius' correction.
448 *fit uti* Mar. Junt. for *fit ut*. 456 *videmur* Mar. Ald. 1 Junt. for *videa-*

denique cum suavi devinxit membra sopore
somnus et in summa corpus iacet omne quiete,
tum vigilare tamen nobis et membra movere
nostra videmur, et in noctis caligine caeca
cernere censemus solem lumenque diurnum
conclusoque loco caelum mare flumina montis
mutare et campos pedibus transire videmur,
et sonitus audire, severa silentia noctis
undique cum constent, et reddere dicta tacentes.
cetera de genere hoc mir*acula* multa videmus,
quae violare fidem quasi sensibus omnia quaerunt,
nequiquam, quoniam pars horum maxima fallit
propter opinatus animi quos addimus ipsi,
pro visis ut sint quae non sunt sensibu' visa.
nam nil aegrius est quam res secernere apertas
ab dubiis, animus quas ab se protinus addit.
  Denique nil sciri siquis putat, id quoque nescit
an sciri possit, quoniam nil scire fatetur.
hunc igitur contra mittam contendere causam,
qui capite ipse sua in statuit vestigia sese.
et tamen hoc quoque uti concedam scire, at id ipsum
quaeram, cum in rebus veri nil viderit ante,
unde sciat quid sit scire et nescire vicissim,
notitiam veri quae res falsique crearit
et dubium certo quae res differre probarit.
invenies primis ab sensibus esse creatam
notitiem veri neque sensus posse refelli.
nam maiore fide debet reperirier illud,
sponte sua veris quod possit vincere falsa.
quid maiore fide porro quam sensus haberi
debet? an ab sensu falso ratio orta valebit
dicere eos contra, quae tota ab sensibus orta est?

tur. 460 *noctis* B corr. Flor. 31 Camb. Pont. Mar. for *montis*. 462 *miracula* Ed. for *mirande*: *acula* was probably absorbed in *multa* and the word completed from 419. *mirando* Flor. 31 Vat. 1136 Othob. Mar. for *mirande*. *miracli* Lach. here as 419. 467 *aegrius est.* Later mss. and old. eds. also Pont. Mar. Ald. 1 Junt. Lamb. etc. *egregius*, absurdly. 468 *addit* A Nicc. Camb. 2 Vat. Junt. Creech. *abdit* B Flor. 31 3 Vat. Pont. Mar. Ald. 1 Lamb. Wak. without meaning.
471 *mittam* Mar. Ald. 1 Junt. for *mituam*. 472 *sua in statuit* Lach. for *suo in statuit*. 479 *sensus* Mar. Junt. for *sensu*. 486 *poterunt* Flor. 31 Camb. for

qui nisi sunt veri, ratio quoque falsa fit omnis.
an poterunt oculos aures reprehendere, an aures
tactus? an hunc porro tactum sapor arguet oris,
an confutabunt nares oculive revincent?
non, ut opinor, ita est. nam seorsum cuique potestas
divisast, sua vis cuiquest, ideoque necesse est
et quod molle sit et gelidum fervensve *seorsum*
et seorsum varios rerum sentire colores
et quaecumque coloribu' sint coniuncta *videre*.
seorsus item sapor oris habet vim, seorsus odores
nascuntur, sorsum sonitus. ideoque necesse est
non possint alios alii convincere sensus.
nec porro poterunt ipsi reprehendere sese,
aequa fides quoniam debebit semper haberi.
proinde quod in quoquest his visum tempore, verumst.
et si non poterit ratio dissolvere causam,
cur ea quae fuerint iuxtim quadrata, procul sint
visa rutunda, tamen praestat rationis egentem
reddere mendose causas utriusque figurae,
quam manibus manifesta suis emittere quoquam
et violare fidem primam et convellere tota
fundamenta quibus nixatur vita salusque.
non modo enim ratio ruat omnis, vita quoque ipsa
concidat extemplo, nisi credere sensibus ausis
praecipitisque locos vitare et cetera quae sint
in genere hoc fugienda, sequi contraria quae sint.
illa tibi est igitur verborum copia cassa
omnis quae contra sensus instructa paratast.
denique ut in fabrica, si pravast regula prima,
normaque si fallax rectis regionibus exit,
et libella aliqua si ex parti claudicat hilum,
omnia mendose fieri atque obstipa necesse est
prava cubantia prona supina atque absona tecta,
iam ruere ut quaedam videantur velle, ruantque

poterit. *poterint* Mar. Ver. Ven. 491 *seorsum* Bentl. for *videri*: a necessary change. Lamb. here interpolates a verse. 493 *videre* Lach. for *necessest* which has come from a neighbouring verse. 495 *Nascuntur* Ver. Ven. Mar. for *nascantur*. 496 *possint* Flor. 31 Mon. Pont. Ald. 1 Junt. for *possunt*. *possent* Camb. 498 *aequa* Flor. 31 Pont. Mar. Ald. 1 Junt. for *aeque*. 500 *poterit* Nicc. for *poteris*. 514 *si* Nicc. B corr. for *sibi*. 517 *Prava* Mar. Ald. 1

prodita iudiciis fallacibus omnia primis,
sic igitur ratio tibi rerum prava necessest
falsaque sit, falsis quaecumque ab sensibus ortast.
Nunc alii sensus quo pacto quisque suam rem
sentiat, haudquaquam ratio scruposa relicta est.
Principio auditur sonus et vox omnis, in auris
insinuata suo pepulere ubi corpore sensum.
corpoream *vocem* quoque enim constare fatendumst
et sonitum, quoniam possunt inpellere sensus.
praeterea radit vox fauces saepe facitque
asperiora foras gradiens arteria clamor.
quippe per angustum turba maiore coorta
ire foras ubi coeperunt primordia vocum,
scilicet expleti quoque ianua raditur oris.
haud igitur dubiumst quin voces verbaque constent
corporeis e principiis, ut laedere possint.
nec te fallit item quid corporis auferat et quid
detrahat ex hominum nervis ac viribus ipsis
perpetuus sermo nigrai noctis ad umbram
aurorae perductus ab exoriente nitore,
praesertim si cum summost clamore profusus.
ergo corpoream vocem constare necessest,
multa loquens quoniam amittit de corpore partem.
551 asperitas autem vocis fit ab asperitate
principiorum et item levor levore creatur.
542 nec simili penetrant auris primordia forma,
cum tuba depresso graviter sub murmure mugit
et reboat raucum regio cita barbara bombum,

Junt. for *parva*. 526 *vocem* om. AB Nicc.: rightly inserted by Lach. before *quoque enim*: Flor. 31 Camb. vulg. place it after. 528 *Praeterea radit* A and Gellius x 26, one Vat. Pont. Avanc. rightly. *Propterea radit* B. *Praeter radit* Nicc. one Vat. Ver. Ven. whence *Praeter radit enim* Flor. 31 Camb. 3 Vat. Brix. Mar. Nauger. vulg. *Praeter enim radit* Junt. 532 *expleti* Lach. for *expletis*, thus simply healing a desperate passage. *raditur* B Politian in marg. Flor. 29: (*creditur* in text). *reditur* A Nicc.; hence *redditur* Flor. 31 Camb. vulg. and to give a meaning to the passage, Mar. Junt. add a verse *Rauca viis, et iter laedit, qua vox it in auras*; Avanc. taking *oris* as a plur. thus *Rauca suis et iter reddit qua vox it in auras*. 542 543 (551 552) rightly placed here by Lamb. first. 543 *levo letiore* AB. *levis levore* Mar. Ald. 1 Junt. *laevor laevore* Lamb. 545 *murmure* Brix. Pont. Mar. Ald. 1 Junt. for *murmura*. 546 *Et reboat raucum regio cita barbara* Lach. for *Et revorat raucum retro cita barbara*: the older readings are

et validis cycni torrentibus ex Heliconis
cum liquidam tollunt lugubri voce querellam.
Hasce igitur penitus voces cum corpore nostro
exprimimus rectoque foras emittimus ore,
mobilis articulat verborum daedala lingua
formaturaque labrorum pro parte figurat.
hoc ubi non longum spatiumst unde una profecta
perveniat vox quaeque, necessest verba quoque ipsa
plane exaudiri discernique articulatim;
servat enim formaturam servatque figuram.
at si interpositum spatium sit longius aequo,
aera per multum confundi verba necessest
et conturbari vocem, dum transvolat auras.
ergo fit, sonitum ut possis sentire neque illam
internoscere, verborum sententia quae sit:
usque adeo confusa venit vox inque pedita.
praeterea verbum saepe unum perciet auris
omnibus in populo, missum praeconis ab ore.
in multas igitur voces vox una repente
diffugit, in privas quoniam se dividit auris
obsignans formam verbi clarumque sonorem.
at quae pars vocum non auris incidit ipsas,
praeterlata perit frustra diffusa per auras.
pars solidis adlisa locis reiecta sonorem
reddit et interdum frustratur imagine verbi.
quae bene cum videas, rationem reddere possis
tute tibi atque aliis, quo pacto per loca sola

mostly too absurd to be mentioned. *Berecynthia barbara* Is. Voss. in ms. notes and in Catullus: *Berecynthia cornua* Bentl. 547 *Et validis cycni torrentibus ex Heliconis* Is. Voss. in ms. notes for *Et validis necti tortis ex Heliconis* of A: the middle words of this line, as of the preceding, were mutilated by some accident. *Et cycni tortis convallibus* Lach. *nete tortis* A corr. B. *nece tortis* Nicc.: hence a vast variety of strange readings, such as *Et gelidis cycni nocte oris* of Bern. 550 *emittimus* A corr. for *mittimus*. 551 *verborum* Lamb. for *nervorum*. 553 'lego *una*, unaquaeque vox perveniat. B' Bentl. for *illa*. 560 *illam*. *illa* Pont. Ald. 1 Junt. *hilum* Lamb. without cause. 563 *verbum*. *peditum* Nicc. and all later mss. and early eds.: hence *edictum* Mar. Ald. 1 Junt. vulg.: *peditum* came from the *pedita* of 562 catching the copyist's eye. 567 *verbi* Lach. for *verbis*: a necessary change. 568 *auris incidit*. '*aureis accidit*. sic reposui, a Plauto et ceteris Latini sermonis auctoribus admonitus' Lamb.; and Lach. thinks he is probably right, as Lucr. himself v 608 uses the same construction. 570 *locis*

saxa paris formas verborum ex ordine reddant,
palantis comites quom montis inter opacos
quaerimus et magna dispersos voce ciemus.
sex etiam aut septem loca vidi reddere vocis,
unam cum iaceres: ita colles collibus ipsi
verba repulsantes iterabant docta referri.
haec loca capripedes satyros nymphasque tenere
finitimi fingunt et faunos esse locuntur
quorum noctivago strepitu ludoque iocanti
adfirmant volgo taciturna silentia rumpi
chordarumque sonos fieri dulcisque querellas,
tibia quas fundit digitis pulsata canentum,
et genus agricolum late sentiscere, quom Pan
pinea semiferi capitis velamina quassans
unco saepe labro calamos percurrit hiantis,
fistula silvestrem ne cesset fundere musam.
cetera de genere hoc monstra ac portenta loquontur,
ne loca deserta ab divis quoque forte putentur
sola tenere. ideo iactant miracula dictis
aut aliqua ratione alia ducuntur, ut omne
humanum genus est avidum nimis auricularum.
Quod superest, non est mirandum qua ratione,
per loca quae nequeunt oculi res cernere apertas,
haec loca per voces veniant aurisque lacessant.
conloquium clausis foribus quoque saepe videmus,
nimirum quia vox per flexa foramina rerum
incolumis transire potest, simulacra renutant;
perscinduntur enim, nisi recta foramina tranant,
qualia sunt vitrei, species qua travolat omnis.

B corr. Mar. for *lopis*. *lapis* Nicc. Lach. as I now think without sufficient reason separates *solidis adlisa* from *locis*. 577 *vocis*: see n. to I 744 *frugis*. *voces* Lach. vulg. 578 *ipsi*. *ipsis* one Vat. Mon. Ver. Ven.: hence Ald. 1 Junt. vulg. before Wak. 579 *docta referri* Lach. for *dicta referri*. *dicta referre* Mar. Junt. vulg. *icta referre* Bentl. *icta* is also in Mon. 582 *iocanti* A corr. for *locanti*. 587 *velamina* Nicc. Flor. 31 Camb. Mon. vulg. for *ullamina*. *vallamina* Heins. in ms. notes, Is. Voss. in ms. notes, Wak. 590 *Cetera* Flor. 31 Camb. Mar. for *Petere*. 594 *nimis auricularum*. *nimi' miraclorum* Lach. after Bentl.: this is now the third time he has introduced into his text the form *miraclum*, which is not once found in the mss. of Lucr. 598 *videmus*. *ubi demus* Lach.: but *Conloquium clausis foribus videmus* = *C. cl. f. fieri v.* and is not the same thing at all as *Conloquium videmus*. *Cum loquimur clausis foribus, quod saepe videmus*

praeterea partis in cunctas dividitur vox,
ex aliis aliae quoniam gignuntur, ubi una
dissuluit semel in multas exorta, quasi ignis
saepe solet scintilla suos se spargere in ignis.
ergo replentur loca vocibus, abdita retro
omnia quae circum fervunt sonituque cientur.
at simulacra viis derectis omnia tendunt
ut sunt missa semel; quapropter cernere nemo
saepem ultra potis est, at voces accipere extra.
et tamen ipsa quoque haec, dum transit clausa *domorum*,
vox optunditur atque auris confusa penetrat
et sonitum potius quam verba audire videmur.
Nec, qui sentimus sucum, lingua atque palatum
plusculum habent in se rationis plus operaeve.
principio sucum sentimus in ore, cibum cum
mandendo exprimimus, ceu plenam spongiam aquai
siquis forte manu premere ac siccare coëpit.
inde quod exprimimus per caulas omne palati
diditur et rarae perplexa foramina linguae.
hoc ubi levia sunt manantis corpora suci,
suaviter attingunt et suaviter omnia tractant
umida linguai circum sudantia templa.
at contra pungunt sensum lacerantque coorta,
quanto quaeque magis sunt asperitate repleta.
deinde voluptas est e suco fine palati;

Mar. Junt.: Pont. notes *videmus* as a solecism for *audimus*. 604 *ubi una* B corr. Lamb. for *ubina*. *ubi nam* Nicc. 605 *Dissuluit* B: see Plaut. miles 279 eds. Ritschl and Fleckeisen, Rhein. mus. n. f. VIII p. 451, Corssen I p. 314. *Dissiluit* A vulg. Lach. 608 *fervunt* Ed. for *fuerunt* transposing one letter: (Plaut. Pseud. 840 *fervont* A, *feerunt* Z, *fervent* vulg.): *feriunt* Lach. *fuerint* Mar. Ald. 1 Junt. vulg. *subsunt* Bern. 611 *Saepem ultra* Bern. for *Saepe supra*. *Saepem intra* Lach. *Se supra* Pont. Ald. 1 Junt. vulg. 612 *domorum* added by Lach. *viarum* Flor. 31 Camb. Mar. vulg. 615 *Nec* Mar. Junt. Bentl. Lach. for *Hoc. qui*. *quis* of Mar. Junt. as Lach. says is not necessary. *Haec quis* Avanc. Lamb. Creech without sense. 616 *plus operaeve* Lach. for *plus opere*: better than *plus operaeque* or *plus operai* or *plusque operai* of others. 619 *ac siccare coëpit*. *siccare recepit* Mar., *capessit* Pont. *exsiccareque coepit* Avanc. in Ald. 1 Lamb. etc.; but at end of his Catullus Avanc. recalls this and says '*ac siccare cöepit* per diaeresin'.

621 *perplexa*. 'in Faern. neque *perplexa* neque *per plexa*, sed *per flexa*' Lamb., and so Mon. rightly perhaps; for Lucr. elsewhere applies *perplexa* only to the entangled atoms, never to the passages of things; yet Virgil has *perplexum iter omne revolvens*. 622 *manantis* Pont. Junt. for *manantes*. 624 *sudantia*. *sidentia*

cum vero deorsum per fauces praecipitavit,
nulla voluptas est, dum diditur omnis in artus.
nec refert quicquam quo victu corpus alatur,
dummodo quod capias concoctum didere possis
artubus et stomachi umidulum servare tenorem.
Nunc aliis alius qui sit cibu' suavis et almus
expediam, quareve, aliis quod triste et amarumst,
hoc tamen esse aliis possit perdulce videri,
tantaque *in* his rebus distantia differitasque,
ut quod ali cibus est aliis fuat acre venenum,
extetque ut serpens, hominis quae tacta salivis
disperit ac sese mandendo conficit ipsa.
praeterea nobis veratrum est acre venenum,
at capris adipes et coturnicibus auget.
ut quibus id fiat rebus cognoscere possis,
principio meminisse decet quae diximus ante,
semina multimodis in rebus mixta teneri.
porro omnes quaecumque cibum capiunt animantes,
ut sunt dissimiles extrinsecus et generatim
extima membrorum circumcaesura coercet,
proinde et seminibus constant variante figura.
semina cum porro distent, differre necessest
intervalla viasque, foramina quae perhibemus,
omnibus in membris et in ore ipsoque palato.
esse minora igitur quaedam maioraque debent,
esse triquetra aliis, aliis quadrata necessest,
multa rutunda, modis multis multangula quaedam.
namque figurarum ratio ut motusque reposcunt,
proinde foraminibus debent differre figurae,

Lach. an elegant, but not I think necessary, change. 627 *fine*. *in fine* Lamb. etc. wrongly. 631 *possis* Flor. 31 Camb. Mon. Ver. Ven. for *posses*. 632 *umidulum* Lach. for *umidum*. *humectum* Pont. Mar. Ald. 1 Junt. vulg. 633 *cibu' suavis et almus* Ed. for *cibus ut videamus*: see Camb. Journ. of phil. I p. 41: for *almus* perhaps *aptus* with Lach. *cibus unicus aptus* Lach.; but *unicus* is not at all appropriate. 636 *in* added by Nonius p. 95, and *est* at end of verse rightly om. by the same. 637 *ali* Lach. for *aliis*. 638 *Extetque ut serpens* Ed. for *Est itaque ut serpens*: VI 690 *Fert itque* mss. for *Fert itaque*. *Est aliquae ut serpens* Lach. *Est utique ut s.* Mar. Junt. Lamb. ed. 3. *Saepe etenim s.* ed. 1 and 2. 641 *coturn. cocturn.* A. *quod turn.* B. 642 *Ut quibus id* Lamb. ed. 2 and 3 for *Id quibus ut*. 648 *et*. *ex* Mon. Junt. Lamb. ed. 1 and 2, Lach. but *et* Mar. *constant variante figura* Lach. for *constant variantque figura*. *distant vari-*

et variare viae proinde ac textura coercet.
hoc ubi quod suave est aliis aliis fit amarum,
illi, cui suave est, levissima corpora debent
contractabiliter caulas intrare palati,
at contra quibus est eadem res intus acerba,
aspera nimirum penetrant hamataque fauces.
nunc facile est ex his rebus cognoscere quaeque.
quippe ubi cui febris bili superante coorta est
aut alia ratione aliquast vis excita morbi,
perturbatur ibi iam totum corpus et omnes
commutantur ibi positurae principiorum;
fit prius ad sensum *ut* quae corpora conveniebant
nunc non conveniant, et cetera sint magis apta,
quae penetrata queunt sensum progignere acerbum;
utraque enim sunt in mellis commixta sapore;
id quod iam supera tibi saepe ostendimus ante.

Nunc age quo pacto naris adiectus odoris
tangat agam. primum res multas esse necessest
unde fluens volvat varius se fluctus odorum,
et fluere et mitti volgo spargique putandumst;
verum aliis alius magis est animantibus aptus
dissimilis propter formas. ideoque per auras
mellis apes quamvis longe ducuntur odore,
volturiique cadaveribus. tum fissa ferarum
ungula quo tulerit gressum promissa canum vis
ducit, et humanum longe praesentit odorem
Romulidarum arcis servator candidus anser.
sic aliis alius nidor datus ad sua quemque
pabula ducit et a taetro resilire veneno
cogit, eoque modo servantur saecla ferarum.

Hic odor ipse igitur, naris quicumque lacessit,
est alio ut possit permitti longius alter;
sed tamen haud quisquam tam longe fertur eorum
quam sonitus, quam vox, mitto iam dicere quam res

antque figura Lamb. ed. 3. 668 *ut* added by Flor. 31 Camb. Mar. *Ut* Lach. for *Fit.* 671 672 Lach. places after 662. Bernays supposes some verses to have been lost before them; I followed him in my small ed. but now believe there is no hiatus: see notes 2. 680 *Volturiique* Pont. Ald. 1 for *Volturique. Vulturiique* Mar. Junt. 681 *promissa. permissa* Gronov. Lach. '*prissa* v. [not A or B] i.e. permissa i.e. immissa, concitata' Is. Voss. in ms. notes. 682 *Ducit.*

quae feriunt oculorum acies visumque lacessunt.
errabundus enim tarde venit ac perit ante
paulatim facilis distractus in aeris auras;
ex alto primum quia vix emittitur ex re:
nam penitus fluere atque recedere rebus odores
significat quod fracta magis redolere videntur
omnia, quod contrita, quod igni conlabefacta:
deinde videre licet maioribus esse creatum
principiis quam vox, quoniam per saxea saepta
non penetrat, qua vox volgo sonitusque feruntur.
quare etiam quod olet non tam facile esse videbis
investigare in qua sit regione locatum;
refrigescit enim cunctando plaga per auras
nec calida ad sensum decurrunt nuntia rerum.
errant saepe canes itaque et vestigia quaerunt.

[Nec tamen hoc solis in odoribus atque saporum
in generest, sed item species rerum atque colores
non ita conveniunt ad sensus omnibus omnes,
ut non sint aliis quaedam magis acria visu.
quin etiam gallum, noctem explaudentibus alis
auroram clara consuetum voce vocare,
noenu queunt rabidi contra constare leones
inque tueri: ita continuo meminere fugai,
nimirum quia sunt gallorum in corpore quaedam
semina, quae cum sunt oculis inmissa leonum,
pupillas interfodiunt acremque dolorem
praebent, ut nequeant contra durare feroces;
cum tamen haec nostras acies nil laedere possint,
aut quia non penetrant aut quod penetrantibus illis
exitus ex oculis liber datur, in remorando
laedere ne possint ex ulla lumina parte.]

Nunc age quae moveant animum res accipe, et unde
quae veniunt veniant in mentem percipe paucis.
principio hoc dico, rerum simulacra vagari
multa modis multis in cunctas undique partis
tenvia, quae facile inter se iunguntur in auris,
obvia cum veniunt, ut aranea bratteaque auri.

Dicit Lach. without cause. 698 *creatum* Mar. Junt. for *creatam.* 699 *quam vox. voci* Lamb. etc. perversely. 712 *rabidi* Wak. for *rapidi.* 719

quippe etenim multo magis haec sunt tenvia textu
quam quae percipiunt oculos visumque lacessunt,
corporis haec quoniam penetrant per rara cientque
tenvem animi naturam intus sensumque lacessunt.
Centauros itaque et Scyllarum membra videmus
Cerbereasque canum facies simulacraque eorum
quorum morte obita tellus amplectitur ossa;
omne genus quoniam passim simulacra feruntur,
partim sponte sua quae fiunt aere in ipso,
partim quae variis ab rebus cumque recedunt
et quae confiunt ex horum facta figuris.
nam certe ex vivo Centauri non fit imago,
nulla fuit quoniam talis natura anim*antis*;
verum ubi equi atque hominis casu convenit imago,
haerescit facile extemplo, quod diximus ante,
propter subtilem naturam et tenvia texta.
cetera de genere hoc eadem ratione creantur.
quae cum mobiliter summa levitate feruntur,
ut prius ostendi, facile uno commovet ictu
quaelibet una animum nobis subtilis imago;
tenvis enim mens est et mire mobilis ipsa.
Haec fieri ut memoro, facile hinc cognoscere possis.
quatenus hoc simile est illi, quod mente videmus
atque oculis, simili fieri ratione necesse est.
nunc igitur docui quoniam me forte leonem
cernere per simulacra, oculos quaecumque lacessunt,
scire licet mentem simili ratione moveri,
per simulacra leonem et cetera quae videt aeque
nec minus atque oculi, nisi quod mage tenvia cernit.
nec ratione alia, cum somnus membra profudit,

illis B corr. for *ilus*: ? *ibus*. 727 *brattea* AB, not *bractea*: so mss. of Virg. Aen. VI 209. 730 *per rara* Mar. Ald. 1 Junt. for *perara*. 735 *Omne genus* Mar. Junt. for *Omnigenus*. *Omnigenum* Nicc. 736 *fiunt* Mar. Ald. 1 Junt. for *flunt* A, *fluunt* A corr. B. 740 *anima* AB, *animai* Nicc. and all before Gif. *animalis* Lamb. ed. 3 vulg. Lach. *animantis* Gif. most properly, as Lucr. does not use the substantive *animal* in the singular, except v 823, where *omne animal* is equivalent to *omnia animalia*: see notes 2 there. 741 *ubi equi atque hominis casu*. *ubi equi casu atque hominis* Lach. who denies that the last syll. of an iambus is ever elided in Lucr. 752 *docui quoniam*. *quoniam docui* Lamb. ed. 2 and 3, etc. and Lach. *leonem* Lach. for *leonum*. *leones* Mar. Ald. 1 Junt. vulg. 755 *leonem et cetera* Lach. for *leonum cetera*: *et* was already added by Mar. Ald. 1 and

mens animi vigilat, nisi quod simulacra lacessunt
haec eadem nostros animos quae cum vigilamus,
usque adeo, certe ut videamur cernere eum quem
rellicta vita iam mors et terra potitast.
hoc ideo fieri cogit natura, quod omnes
corporis offecti sensus per membra quiescunt
nec possunt falsum veris convincere rebus.
praeterea meminisse iacet languetque sopore
nec dissentit eum mortis letique potitum
iam pridem, quem mens vivom se cernere credit.
quod superest, non est mirum simulacra moveri
bracchiaque in numerum iactare et cetera membra;
nam fit ut in somnis facere hoc videatur imago;
quippe ubi prima perit alioque est altera nata
inde statu, prior hic gestum mutasse videtur.
scilicet id fieri celeri ratione putandumst:
tanta est mobilitas et rerum copia tanta
tantaque sensibili quovis est tempore in uno
copia particularum, ut possit suppeditare.
[Multaque in his rebus quaeruntur multaque nobis
clarandumst, plane si res exponere avemus.
quaeritur in primis quare, quod cuique libido
venerit, extemplo mens cogitet eius id ipsum.
anne voluntatem nostram simulacra tuentur
et simul ac volumus nobis occurrit imago,
si mare, si terrast cordi, si denique caelum?
conventus hominum pompam convivia pugnas,
omnia sub verbone creat natura paratque?
cum praesertim aliis eadem in regione locoque
longe dissimilis animus res cogitet omnis.
quid porro, in numerum procedere cum simulacra
cernimus in somnis et mollia membra movere,
mollia mobiliter cum alternis bracchia mittunt
et repetunt oculis gestum pede convenienti?

Junt.: Lamb. Creech Wak. all blunder sadly here. 761 *Rellicta vita* Bern. for *Reddita vita*, and before him Is. Voss. in ms. notes '*Relicta vita*, malim tamen *Reddita* media producta ut Salmasius'. *Reddita pro v.* Lach. 783 *si terrast cordi* Ed. for *si terram cordist*. [*si terra est cordi* Pont. before me, as I now find.] The frequency with which our mss. thus transpose this *st* is very remarkable: see Lach. to II 275 who cites ten instances: so 799, the repe-

scilicet arte madent simulacra et docta vagantur,
nocturno facere ut possint in tempore ludos.
an magis illud erit verum? quia tempore in uno,
cum sentimus id, et cum vox emittitur una,
tempora multa latent, ratio quae comperit esse,
propterea fit uti quovis in tempore quaeque
praesto sint simulacra locis in quisque parata.
et quia tenvia sunt, nisi quae contendit, acute 802
cernere non potis est animus; proinde omnia quae sunt
praeterea pereunt, nisi *si*quae ad se ipse paravit.
ipse parat sese porro speratque futurum
ut videat quod consequitur rem quamque; fit ergo.
nonne vides oculos etiam, cum tenvia quae sunt
cernere coeperunt, contendere se atque parare,
nec sine eo fieri posse ut cernamus acute?
et tamen in rebus quoque apertis noscere possis,
si non advertas animum, proinde esse quasi omni
tempore semotum fuerit longeque remotum.
cur igitur mirumst, animus si cetera perdit
praeterquam quibus est in rebus deditus ipse?
deinde adopinamur de signis maxima parvis
ac nos in fraudem induimus frustraminis ipsi.]
  Fit quoque ut interdum non suppeditetur imago
eiusdem generis, sed femina quae fuit ante,
in manibus vir uti factus videatur adesse,
aut alia ex alia facies aetasque sequatur.
826 quod ne miremur sopor atque oblivia curant.
822 [Illud in his rebus vitium vementer avessis

tition of 774, has *Tanta mobilitast. si terra est, si cordi* Junt. 791 *repetunt. referunt* Lach. 795 *Cum sentimus id, et cum* Ed. for *Consentimus id est cum*: a slight and necessary alteration. Lamb. and Lach. in vain declare the verse to be out of place: the latter puts it, thus altered *Quod sentimus, id est?* cet., before 783, where it sadly involves the construction. 798 *sint* Flor. 31 Camb. Pont. Mar. for *sin* B, *in* A Nicc. *locis* Flor. 31 and Candidus at end of Junt. for *locos*.

799 800 801=774 771 772: an evident gloss here. Lamb. retains the first and rejects the two last; while he wrongly obelises the whole three in their former place, where they cannot be dispensed with. 802 *nisi quae contendit. nisi se contendit* Lamb. prompted he says by 809, and Lach.: but see notes 2. 804 *nisi si quae ad se ipse* Lach. for *nisi que ex se ipse. nisi sic sese ipse* Lamb. 805 *futurum* Pont. Junt. for *futuram.* 808=804. 815 *Praeterquam* Avanc. for *Praeterea quam.* 818 *non* Brix. Pont. Mar. for *nos.* 820 *vir uti* B corr. Flor. 31 Camb. Mar. for *virtuti. vir tunc* Nicc. *vir tum* Lamb. etc. 822

effugere, errorem vitareque praemetuenter,
lumina ne facias oculorum clara creata,
825 prospicere ut possemus, et ut proferre quea*mus*
proceros passus, ideo fastigia posse
surarum ac feminum pedibus fundata plicari,
bracchia tum porro validis ex apta lacertis
esse manusque datas utraque *ex* parte ministras,
ut facere ad vitam possemus quae foret usus.
cetera de genere hoc inter quaecumque pretantur,
omnia perversa praepostera sunt ratione,
nil ideo quoniam natumst in corpore ut uti
possemus, sed quod natumst id procreat usum,
nec fuit ante videre oculorum lumina nata
nec dictis orare prius quam lingua creatast,
sed potius longe linguae praecessit origo
sermonem multoque creatae sunt prius aures
quam sonus est auditus, et omnia denique membra
ante fuere, ut opinor, eorum quam foret usus;
haud igitur potuere utendi crescere causa.
at contra conferre manu certamina pugnae
et lacerare artus foedareque membra cruore
ante fuit multo quam lucida tela volarent,
et volnus vitare prius natura coegit
quam daret obiectum parmai laeva per artem.
scilicet et fessum corpus mandare quieti
multo antiquius est quam lecti mollia strata,
et sedare sitim prius est quam pocula natum.
haec igitur possunt utendi cognita causa

(826) brought here by B corr. Mar. Ald. 1 Junt. 823 *avessis* Ed. for *inesse*: p. 171 of the archetype, the terminations of the lines therefore being towards the outer margin, ended with 827: by some chance then *s* the last letter of this line, and the three last, *mus*, of 826 were lost; *avessi* was then changed to *inesse*, *quea* to *via*. *vitium vementer rebu' necessest* Lach.: a violent alteration. *inesto* Mar. Ald. 1 Junt. Gronov. *avemus Te effugere* Bern. 824 *errorem vitareque* B corr. Avanc. for *errore multareque. errore multas que premeditentur* Flor. 31 Camb. one Vat. corruptly for *e. v. praemetuenter* (*praemetuentur* A): this has led to further corruptions by Mar. Junt. Lamb. etc. 826 *possemus* Lach. for *possimus*, as the usage of Lucr. requires. *queamus* Lach. for *via*: see above to 823: the vulg. *viai* has no sense. 827 *fastigia. suffragia* Pont. 830 *ex* added by Lach. *a* Mar. Ald. 1 Junt. vulg. 836 *nata. natum* Lach. as in 850: but as *nata* gives a good sense, I have retained it: it seems to me more elegant than the other.

credier, ex usu quae sunt vitaque reperta.
illa quidem seorsum sunt omnia quae prius ipsa
nata dedere suae post notitiam utilitatis.
quo genere in primis sensus et membra videmus;
quare etiam atque etiam procul est ut credere possis
utilitatis ob officium potuisse creari.]

[Illud item non est mirandum, corporis ipsa
quod natura cibum quaerit cuiusque animantis.
quippe etenim fluere atque recedere corpora rebus
multa modis multis docui, sed plurima debent
ex animalibu'. *quae* quia sunt exercita motu,
multaque per sudorem ex alto pressa feruntur,
multa per os exhalantur, cum languida anhelant,
his igitur rebus rarescit corpus et omnis
subruitur natura; dolor quam consequitur rem.
propterea capitur cibus ut suffulciat artus
et recreet vires interdatus atque patentem
per membra ac venas ut amorem opturet edendi.
umor item discedit in omnia quae loca cumque
poscunt umorem; glomerataque multa vaporis
corpora, quae stomacho praebent incendia nostro,
dissupat adveniens liquor ac restinguit ut ignem,
urere ne possit calor amplius aridus artus.
sic igitur tibi anhela sitis de corpore nostro
abluitur, sic expletur ieiuna cupido.]

Nunc qui fiat uti passus proferre queamus,
cum volumus, varieque datum sit membra movere,
et quae res tantum hoc oneris protrudere nostri
corporis insuerit, dicam: tu percipe dicta.
dico animo nostro primum simulacra meandi
accidere atque animum pulsare, ut diximus ante.
inde voluntas fit; neque enim facere incipit ullam
rem quis*quam*, quam mens providit quid velit ante.
id quod providet, illius rei constat imago.

862 *quae quia* Lach. for *quia*. *et quia* Vat. 3276 Brix. Pont. *haec quia* Wak. *his, quia* Ald. 1 Junt. *his quae* Mar. *iis, quae* Lamb. 863 foll.: by a better stopping I have made the passage quite clear: the apodosis of the sentence begins with *His igitur*. Lach. inverts 863 and 864. Comp. 203. 877 *fiat* Camb. Brix. Pont. Mar. for *flat*. 878 *varieque* Ver. Ven. Mar. for *vareque*.
884 *quisquam quam* Brix. Mar. for *quis quam*. 885 *Id quod*. *At, quod*

ergo animus cum sese ita commovet ut velit ire
inque gredi, ferit extemplo quae in corpore toto
per membra atque artus animai dissita vis est.
et facilest factu, quoniam coniuncta tenetur.
inde ea proporro corpus ferit, atque ita tota
paulatim moles protruditur atque movetur.
praeterea tum rarescit quoque corpus et aer,
scilicet ut debet qui semper mobilis extat,
per patefacta venit penetratque foramina largus
et dispargitur ad partis ita quasque minutas
corporis. hic igitur rebus fit utrimque duabus,
†corporis ut ac navis velis ventoque feratur.
nec tamen illud in his rebus mirabile constat,
tantula quod tantum corpus corpuscula possunt
contorquere et onus totum convertere nostrum.
quippe etenim ventus suptili corpore tenvis
trudit agens magnam magno molimine navem
et manus una regit quantovis impete euntem
atque gubernaclum contorquet quolibet unum,
multaque per trocleas et tympana pondere magno
commovet atque levi sustollit machina nisu.

Nunc quibus ille modis somnus per membra quietem
inriget atque animi curas e pectore solvat,
suavidicis potius quam multis versibus edam;
parvus ut est cycni melior canor, ille gruum quam
clamor in aetheriis dispersus nubibus austri.
tu mihi da tenuis aures animumque sagacem,
ne fieri negites quae dicam posse retroque
vera repulsanti discedas pectore dicta,
tutimet in culpa cum sis neque cernere possis.
principio somnus fit ubi est distracta per artus
vis animae partimque foras eiecta recessit
et partim contrusa magis concessit in altum;
dissoluuntur enim tum demum membra fluuntque.

Lamb. Gif. Creech etc. wrongly. *constat* Flor. 31 Mar. for *constare*. 890 *ferit* Mar. Ald. 1 Junt. for *perit*. 897 is corrupt: see notes 2. *Corpus ut ad navis* Ed. in ed. 2. *Aeque id ut ac navis* Bern. and Ed. in ed. 1. *Corporis ut* Camb. Vat. 3276: also Lach. after Muretus. *Corpus uti, ut* Lamb. Creech. *velis ventoque*. *remis ventoque* Gassendi opera II p. 506 b. 905 *pondere magno*. 'immo *pondera magna*' Lach. without good reason: comp. v 556. 915 *Tutimet* Ed. with

nam dubium non est, animai quin opera sit
sensus hic in nobis, quem cum sopor inpedit esse,
tum nobis animam perturbatam esse putandumst
eiectamque foras; non omnem; namque iaceret
aeterno corpus perfusum frigore leti.
quippe ubi nulla latens animai pars remaneret
in membris, cinere ut multa latet obrutus ignis,
unde reconflari sensus per membra repente
posset, ut ex igni caeco consurgere flamma?
  Sed quibus haec rebus novitas confiat et unde
perturbari anima et corpus languescere possit,
expediam: tu fac ne ventis verba profundam.
principio externa corpus de parte necessum est,
aeriis quoniam vicinum tangitur auris,
tundier atque eius crebro pulsarier ictu,
proptereaque fere res omnes aut corio sunt
aut etiam conchis aut callo aut cortice tectae.
interiorem etiam partem spirantibus aer
verberat hic idem, cum ducitur atque reflatur.
quare utrimque secus cum corpus vapulet et cum
perveniant plagae per parva foramina nobis
corporis ad primas partis elementaque prima,
fit quasi paulatim nobis per membra ruina.
conturbantur enim positurae principiorum
corporis atque animi. fit uti pars inde animai
eiciatur et introrsum pars abdita cedat,
pars etiam distracta per artus non queat esse
coniuncta inter se neque motu mutua fungi;
inter enim saepit coetus natura viasque;
ergo sensus abit mutatis motibus alte.
et quoniam non est quasi quod suffulciat artus,
debile fit corpus languescuntque omnia membra,
bracchia palpebraeque cadunt poplitesque cubanti

AB Nicc. *Tutemet* vulg. Lach. 928 *Posset* Lach. for *Possit.* 929 *confiat* Pont. Lach. for *conflat. confletur* Flor. 31 Lamb. vulg. 934 *eius. ab ibus* Lach.: but see notes 2. 944 *fit uti* AB Nicc. Flor. 31 Camb. *sicuti* Brix. *sicut* Ver. Ven. *sic, ut* Pont. Mar. vulg. wrongly. 945 *Eiciatur* Lamb. for *Eliciatur.*

952 953, though perfectly sound, are much corrupted by Lamb. Creech vulg. Is. Vossius' ms. note is worth quoting, as Haverc. and Preiger misrepresent, and consequently Wak. and Lach. misapprehend it; 'omnino legend.: *poplitesque cubanti*

saepe tamen summittuntur virisque resolvunt.
deinde cibum sequitur somnus, quia, quae facit aer,
haec eadem cibus, in venas dum diditur omnis,
efficit. et multo sopor ille gravissimus exstat
quem satur aut lassus capias, quia plurima tum se
corpora conturbant magno contusa labore.
fit ratione eadem coniectus partim animai
altior atque foras eiectus largior eius,
et divisior inter se ac distractior in test.
  Et quo quisque fere studio devinctus adhaeret
aut quibus in rebus multum sumus ante morati
atque in ea ratione fuit contenta magis mens,
in somnis eadem plerumque videmur obire;
causidici causas agere et componere leges,
induperatores pugnare ac proelia obire,
nautae contractum cum ventis degere bellum,
nos agere hoc autem et naturam quaerere rerum
semper et inventam patriis exponere chartis.
cetera sic studia atque artes plerumque videntur
in somnis animos hominum frustrata tenere.
et quicumque dies multos ex ordine ludis
adsiduas dederunt operas, plerumque videmus,
cum iam destiterunt ea sensibus usurpare,
relicuas tamen esse vias in mente patentis,
qua possint eadem rerum simulacra venire.
per multos itaque illa dies eadem obversantur
ante oculos, etiam vigilantes ut videantur
cernere saltantis et mollia membra moventis
et citharae liquidum carmen chordasque loquentis
auribus accipere et consessum cernere eundem
scenaique simul varios splendere decores.

Saepe tamae [not *tama*] *summittuntur.* Tama quid sit docet Festus, cubantem vero tamam dixit quod deorsum ad pedes tendat. sic infra *cubantia tecta.* Idem error apud Nonium in versu Lucilii in voce *differre*, ubi pro *tama* legitur *tamen*'.

959 *partim* Lach. for *parte*: comp. 918. *porro* Mar. Ald. 1 Junt. vulg. 961 *in test* Ed. for *intus*: VI 674 *qui viisus* mss. for *quivis est*: comp. 916 and 946, and *capias* in 957. *actus* Lach. 962 *quo...devinctus. quo...defunctus* Mon. Ven. Ald. 1 Junt. *quoi...devinctus* Lamb. without reason. 964 *in ea. in qua* Mar. Junt. vulg. wrongly. 968 *degere. cernere* Lamb. 982 *consessum* Mar. Junt. for *consensum.* 983 *Scenaique* Brix. (?), Pont. Ald. 1 Junt. for

usque adeo magni refert studium atque voluptas,
et quibus in rebus consuerint esse operati
non homines solum sed vero animalia cuncta.
quippe videbis equos fortis, cum membra iacebunt,
in somnis sudare tamen spirareque semper
et quasi de palma summas contendere viris,
aut quasi carceribus patefactis
999 venantumque canes in molli saepe quiete
991 iactant crura tamen subito vocisque repente
mittunt et crebro redducunt naribus auras,
ut vestigia si teneant inventa ferarum,
expergefactique secuntur inania saepe
995 cervorum simulacra, fugae quasi dedita cernant,
donec discussis redeant erroribus ad se.
at consueta domi catulorum blanda propago
998 discutere et corpus de terra corripere instant
proinde quasi ignotas facies atque ora tuantur.
et quo quaeque magis sunt aspera seminiorum,
tam magis in somnis eadem saevire necessust.
at variae fugiunt volucres pinnisque repente
sollicitant divom nocturno tempore lucos,
accipitres somno in leni si proelia pugnas
edere sunt persectantes visaeque volantes.
porro hominum mentes, magnis quae motibus edunt
magna, itidem saepe in somnis faciuntque geruntque,
reges expugnant, capiuntur, proelia miscent,
tollunt clamorem quasi si iugulentur ibidem.
multi depugnant gemitusque doloribus edunt

Scenatque. 984 *voluptas* Lach. for *voluntas.* 989 *de palma summas* Lamb. for *palmas. palmis* A corr. Nicc. all before Lamb. 990 *saepe quiete* which mss. add at end has of course come from 991 (999) and supplanted the words of Lucr. *colligere aestum* Lach. offers: *velle volare* might also do. 991 (999) was brought here by Ald. 1 Junt. and by Mon., but there 998 999 (997 998) precede it. 992 *vocis*: see n. to I 744 *frugis. voces* Lach. vulg. 996 *fugae* Mar. Ald. 1 Junt. first for *fuga.* 997 *redeant erroribus* Lamb. after Turnebus for *redeant terroribus.* 1000—1003 are merely 992—995 repeated because of 991 (999): see introduction p. 29. 1005 *quo. quam* Lamb. wrongly. *seminiorum. semina eorum* Lamb. 'Marull. et vulg. semina eorum' says Gif. and so Mar. changes *seminiorum* of Mon. to *semina eorum.* Junt. has rightly *seminiorum.*

1009 *que* wrongly added by Mar. Ald. 1 Junt. vulg. at end: see II 118. 1011 *motibus* Mon. Pont. Ald. 1 Junt. vulg. for *montibus. Magna* I join with what pre-

et quasi pantherae morsu saevive leonis
mandantur magnis clamoribus omnia complent.
multi de magnis per somnum rebu' loquuntur
indicioque sui facti persaepe fuere.
multi mortem obeunt. multi, de montibus altis
ut qui praecipitent ad terram corpore toto,
externantur et ex somno quasi mentibu' capti
vix ad se redeunt permoti corporis aestu.
flumen item sitiens aut fontem propter amoenum
adsidet et totum prope faucibus occupat amnem.
puri saepe lacum propter si ac dolia curta
somno devincti credunt se extollere vestem,
totius umorem saccatum corpori' fundunt,
cum Babylonica magnifico splendore rigantur.
tum quibus aetatis freta primitus insinuatur
semen, ubi ipsa dies membris matura creavit,
conveniunt simulacra foris e corpore quoque
nuntia praeclari voltus pulchrique coloris,
qui ciet inritans loca turgida semine multo,
ut quasi transactis saepe omnibu' rebu' profundant
fluminis ingentis fluctus vestemque cruentent.
  Sollicitatur id *in* nobis, quod diximus ante,
semen, adulta aetas cum primum roborat artus.
namque alias aliud res commovet atque lacessit;
ex homine humanum semen ciet una hominis vis.
quod simul atque suis eiectum sedibus exit,
per membra atque artus decedit corpore toto
in loca conveniens nervorum certa cietque
continuo partis genitalis corporis ipsas.
inritata tument loca semine fitque voluntas
eicere id quo se contendit dira lubido,

cedes. *Magna etenim* Mar. Junt. Lamb. wrongly. *mentes, magnis qui mentibus e. M.* Lach. strangely. 1021 *Ut qui* A p. m. rightly. *Ut quasi* BA corr. Nicc. Flor. 31 Camb. all Vat. Mon. etc.: hence much confusion before Wak. *Se quasi* Mar. 1022 *Externantur* Lach. for *Exterruntur. Exterrentur* vulg. 1026 *sei* Lach. for *se*: Mar. Junt. vulg. omit *se* in 1027, and 1028 insert *ut* after (Avanc. before) *saccatum*, and read *fundant* with Brix. (?) Ver. Ven. 1032 *quoque. quodam* Lach. without reason I think. 1034 *Qui* Lamb. for *Quae.* 1035 *Ut* Mar. Nauger. for *Et.* 1036 *cruentent* Flor. 31 Camb. for *cruentet.*

1037 *id in nobis* Flor. 31 Camb. Pont. Avanc. at end of Catullus for *id nobis. id e* Lach. *idem* Brix. Ver. Ven. Avanc. in Ald. 1. 1038 *adulta* B corr.

idque petit corpus, mens unde est saucia amore.
namque omnes plerumque cadunt in vulnus et illam
emicat in partem sanguis unde icimur ictu,
et si comminus est, hostem ruber occupat umor.
sic igitur Veneris qui telis accipit ictus,
sive puer membris muliebribus hunc iaculatur
seu mulier toto iactans e corpore amorem,
unde feritur, eo tendit gestitque coire
et iacere umorem in corpus de corpore ductum;
namque voluptatem praesagit muta cupido.
  Haec Venus est nobis; hinc autemst nomen amoris,
hinc illaec primum Veneris dulcedinis in cor
stillavit gutta et successit frigida cura.
nam si abest quod ames, praesto simulacra tamen sunt
illius et nomen dulce obversatur ad auris.
sed fugitare decet simulacra et pabula amoris
absterrere sibi atque alio convertere mentem
et iacere umorem conlectum in corpora quaeque
nec retinere, semel conversum unius amore,
et servare sibi curam certumque dolorem.
ulcus enim vivescit et inveterascit alendo
inque dies gliscit furor atque aerumna gravescit,
si non prima novis conturbes volnera plagis
volgivagaque vagus Venere ante recentia cures
aut alio possis animi traducere motus.
  Nec Veneris fructu caret is qui vitat amorem,
sed potius quae sunt sine poena commoda sumit;
nam certe purast sanis magis inde voluptas
quam miseris. etenim potiundi tempore in ipso
fluctuat incertis erroribus ardor amantum
nec constat quid primum oculis manibusque fruantur.

Mar. Ald. 1 Junt. for *advita*. 1047 = 1034. 1057 *muta* A Nicc. Flor. 31 Camb. Mon. old eds. Junt. *multa* B Avanc. Nauger. Lamb. vulg. before Lach. 1058 *nomen*. *momen* Lach. most unpoetically; Creech more elegantly, but without necessity, *numen*: see Camb. Journ. of phil. I p. 35. Lach. also in the next verse wrongly puts a stop at *illaec*. *illaec* A corr. for *ille* A, *illa* B. *illace* Nicc. one Vat. *illa et* Flor. 31 Camb. 3 Vat. Pont. 1060 *frigida*. *fervida* Mar. Junt. (not Nauger.) Creech. 1061 *ames*. *aves* Lach. without necessity: see notes 2. 1065 *conlectum* (*collectum*) Junt. not Pont. or Mar. for *coniectum*. *congestum* Avanc. at end of Catullus.

quod petiere, premunt arte faciuntque dolorem
corporis et dentes inlidunt saepe labellis
osculaque adfligunt, quia non est pura voluptas
et stimuli subsunt qui instigant laedere id ipsum
quodcumque est, rabies unde illaec germina surgunt.
sed leviter poenas frangit Venus inter amorem
blandaque refrenat morsus admixta voluptas.
namque in eo spes est, unde est ardoris origo,
restingui quoque posse ab eodem corpore flammam.
quod fieri contra totum natura repugnat;
unaque res haec est, cuius quom plurima habemus,
tum magis ardescit dira cuppedine pectus.
nam cibus atque umor membris adsumitur intus;
quae quoniam certas possunt obsidere partis,
hoc facile expletur laticum frugumque cupido.
ex hominis vero facie pulchroque colore
nil datur in corpus praeter simulacra fruendum
tenvia; quae vento spes raptast saepe misella.
ut bibere in somnis sitiens quom quaerit et umor
non datur, ardorem qui membris stinguere possit,
sed laticum simulacra petit frustraque laborat
in medioque sitit torrenti flumine potans,
sic in amore Venus simulacris ludit amantis
nec satiare queunt spectando corpora coram,
nec manibus quicquam teneris abradere membris
possunt errantes incerti corpore toto.
denique cum membris conlatis flore fruuntur

1068 *Ulcus* A corr. for *Vicus*. 1081 *adfligunt* A Nicc. Flor. 31 Camb. all Vat. Mon. rightly. *adfigunt* B Pont. and in marg. Mar. Junt. Lamb. etc. 1083 *illaec germina* Lach. after a friend of Lamb. for *illae cermina* (?) A p. m. *ille germina* B. *ille haec germina* A corr. Nicc.: see 1059. 1085 *refrenat* Nicc. for *frenat*. 1089 *cuius quom, Tum* Ed. for *cuius quam, Tam*. *cuius quo mage* Lach. *cuius quo pluria* Mar. Ald. 1 Junt. *quam pluria* Lamb. etc. which is not Latin. [But comparing Ter. heaut. 997 *Nam quam maxime huic vana haec suspicio Erit, tam facillume patris pacem in leges conficiet suas;* Cato r. r. 85 9 *Quam plurimum bibit, tam maxime sitit;* and old poet (inc. fab. 160 Ribb.) ap. Quintilian IX 3 15 *Quam magis aerumna urget, tam magis ad maleficiendum urget*; and Aen. VII 787 quoted there: perhaps Lucr. mixed the two constructions and wrote as his mss. give. Compare too Plaut. aul. 229 *Quam ad probos propinquitate proxume te adiunxeris, Tam optumumst*: and see Ussing there.] 1096 *raptast* Ed. for *raptat*. *rapta est* Vat. 3276 Pont. Candidus at end of Junt. Wak. *mentem spes raptat* Lach. *mentem spe lactant* or *captant* Bentl. 1098 *membris stinguere*

aetatis, iam cum praesagit gaudia corpus
atque in eost Venus ut muliebria conserat arva,
adfigunt avide corpus iunguntque salivas
oris et inspirant pressantes dentibus ora,
nequiquam, quoniam nil inde abradere possunt
nec penetrare et abire in corpus corpore toto;
nam facere interdum velle et certare videntur:
usque adeo cupide in Veneris compagibus haerent,
membra voluptatis dum vi labefacta liquescunt.
tandem ubi se erupit nervis conlecta cupido,
parva fit ardoris violenti pausa parumper.
inde redit rabies eadem et furor ille revisit,
cum sibi quid cupiant ipsi contingere quaerunt,
nec reperire malum id possunt quae machina vincat;
usque adeo incerti tabescunt volnere caeco.
  Adde quod absumunt viris pereuntque labore,
adde quod alterius sub nutu degitur aetas.
labitur interea res et Babylonica fiunt,
languent officia atque aegrotat fama vacillans.
huic lenta et pulchra in pedibus Sicyonia rident
scilicet et grandes viridi cum luce zmaragdi
auro includuntur teriturque thalassina vestis
adsidue et Veneris sudorem exercita potat.
et bene parta patrum fiunt anademata, mitrae,
interdum in pallam atque Alidensia Ciaque vertunt.
eximia veste et victu convivia, ludi,

Avanc. for *membri stinguere* or *membris tinguere*. 1115 *conlecta* Lamb. for *coniecta*. 1118 *quid* Lach. for *quod*: a necessary change. 1121 *viris* (*vires*) Pont. Mar. Junt. for *utris*. 1123 *Babylonica* Pius in notes for *Babylonia*. *vadimonia* Mar. Junt. vulg. before Lach. 1124 *vacillans* Mar. Junt. for *vigillans*. *vacilans* Avanc. 1125 *Huic lenta* Ed. for *Unguenta*: see Camb. Journ. of phil. IV p. 287: the reading is of course quite uncertain: indeed *unguenta* may have come from *Languent* of 1124 and have expelled a totally different word: perhaps *Arguta*, if *huic* were not wanted: comp. Catull. 68 72 *Innixa arguta constituit solea*; and Tib. I 8 14. *Argentum* Lach. 1129 *fiunt* B corr. Mar. Ald. 1 Junt. for *flunt*. 1130 *Alidensia* of mss. may be right: see notes 2. *alideusia* Lach. very ingeniously; but yet *alideusia* is not even a known Greek word. *ac Melitensia Ceaque* Lamb. after 'Adrianus Turnebus, seu potius Gul. Pelliserius, Episc. Montepessul.' *Ciaque* Lach. for *chia*: so Cic. de nat. deor. I 118 *Prodicus Cius* Victorius: *chiuis* or *chius* mss. 1131 *ludi* A corr. Nicc. for *luidi*. *lychni* Lach.: but see notes 2; and v 295 from which it appears that Lucr. wrote *ly̆chīni* or *luchini* or *lichini*.

pocula crebra, unguenta coronae serta parantur,
nequiquam, quoniam medio de fonte leporum
surgit amari aliquit quod in ipsis floribus angat,
aut cum conscius ipse animus se forte remordet
desidiose agere aetatem lustrisque perire,
aut quod in ambiguo verbum iaculata reliquit
quod cupido adfixum cordi vivescit ut ignis,
aut nimium iactare oculos aliumve tueri
quod putat in voltuque videt vestigia risus.
  Atque in amore mala haec proprio summeque secundo
inveniuntur; in adverso vero atque inopi sunt,
prendere quae possis oculorum lumine operto,
innumerabilia; ut melius vigilare sit ante,
qua docui ratione, cavereque ne inliciaris.
nam vitare, plagas in amoris ne iaciamur,
non ita difficile est quam captum retibus ipsis
exire et validos Veneris perrumpere nodos.
et tamen implicitus quoque possis inque peditus
effugere infestum, nisi tute tibi obvius obstes
et praetermittas animi vitia omnia primum
aut quae corpori' sunt eius, *si*quam petis ac vis.
nam faciunt homines plerumque cupidine caeci,
et tribuunt ea quae non sunt his commoda vere.
multimodis igitur pravas turpisque videmus
esse in deliciis summoque in honore vigere.
atque alios alii inrident Veneremque süadent
ut placent, quoniam foedo adflictentur amore,
nec sua respiciunt miseri mala maxima saepe.
nigra melichrus est, inmunda et fetida acosmos,
caesia Palladium, nervosa et lignea dorcas,
parvula, pumilio, chariton mia, tota merum sal,
magna atque inmanis cataplexis plenaque honoris.
balba loqui non quit, traulizi, muta pudens est;
at flagrans odiosa loquacula Lampadium fit.
ischnon eromenion tum fit, cum vivere non quit

1141 *mala haec* Flor. 31 Camb. 2 Vat. Pont. Mar. for *male haec*. 1145 *inliciaris* Ald. 1, *ill.* Mar. Junt. for *inligniaris*: so III 553 *linguntur* mss. for *licuntur*. 1152 *Aut* Lach. for *Ut*. *Et* Pont. Mar. *Tum* Nauger vulg. *si quam petis* Lach. for *quam praepetis* A Nicc. Flor. 31 Camb. *quam precis* B. *quam percupis* Lamb. 1156 *deliciis* Camb. Mar. for *delictis*.

prae macie; rhadine verost iam mortua tussi.
at tumida et mammosa Ceres est ipsa ab Iaccho,
simula Silena ac saturast, labeosa philema.
cetera de genere hoc longum est si dicere coner.
sed tamen esto iam quantovis oris honore,
cui Veneris membris vis omnibus exoriatur:
nempe aliae quoque sunt; nempe hac sine viximus ante;
nempe eadem facit, et scimus facere, omnia turpi,
et miseram taetris se suffit odoribus ipsa
quam famulae longe fugitant furtimque cachinnant.
at lacrimans exclusus amator limina saepe
floribus et sertis operit postisque superbos
unguit amaracino et foribus miser oscula figit;
quem si, iam *am*missum, venientem offenderit aura
una modo, causas abeundi quaerat honestas,
et meditata diu cadat alte sumpta querella,
stultitiaque ibi se damnet, tribuisse quod illi
plus videat quam mortali concedere par est.
nec Veneres nostras hoc fallit; quo magis ipsae
omnia summo opere hos vitae poscaenia celant
quos retinere volunt adstrictosque esse in amore,
nequiquam, quoniam tu animo tamen omnia possis
protrahere in lucem atque omnis inquirere risus
et, si bello animost et non odiosa, vicissim
praetermittere *et* humanis concedere rebus.

Nec mulier semper ficto suspirat amore
quae complexa viri corpus cum corpore iungit
et tenet adsuctis umectans oscula labris.
nam facit ex animo saepe et communia quaerens
gaudia sollicitat spatium decurrere amoris.
nec ratione alia volucres armenta feraeque

1168 *At tumida* Bern. for *At iamina*: this I had myself seen many years ago on comparing Ovid ars II 661, where he is imitating Lucr. *At Lamia* Avanc. Lach. *At gemina* Lamb. vulg. 1174 *turpi* Nauger. for *turpis*. 1176 *longe* Flor. 31 Camb. for *longi*. 1180 *iam ammissum* (*admissum*) Lamb. for *iam missum*. *iam ammissu* Lach. *iam iussu* Bern. *iam immissum* Mar. Ald. 1 Junt. *venientem*. *veniens* Ald. 1 Junt. Bentl. 1182 *cadat* Lamb. for *cadet*. 1183 *Stultitia*. *Stultitiae* Mar. Ald. 1 Junt. Lach. 1188 *possis* Mar. Junt. for *posses*. 1189 *inquirere risus*. *in usus* Pont. Junt. *lusus* Mar. Candidus at end of Junt. *anquirere nisus* Lamb. Creech etc. 1191 *et* added by Mar. Lach. *Praetermittet te* Junt.

et pecudes et equae maribus subsidere possent,
si non, ipsa quod illorum subat ardet abundans
natura et Venerem salientum laeta retractat.
nonne vides etiam quos mutua saepe voluptas
vinxit, ut in vinclis communibus excrucientur?
in triviis quam saepe canes, discedere aventis,
1210 divorsi cupide summis ex viribu' tendunt,
1204 quom interea validis Veneris compagibus haerent!
quod facerent numquam nisi mutua gaudia nossent
quae iacere in fraudem possent vinctosque tenere.
quare etiam atque etiam, ut dico, est communi' voluptas.

Et commiscendo quom semine forte virili
1209 femina vim vicit subita vi corripuitque,
tum similes matrum materno semine fiunt,
ut patribus patrio. sed quos utriusque figurae
esse vides, iuxtim miscentes vulta parentum,
corpore de patrio et materno sanguine crescunt,
semina cum Veneris stimulis excita per artus
obvia conflixit conspirans mutuus ardor,
et neque utrum superavit eorum nec superatumst.
fit quoque ut interdum similes existere avorum
possint et referant proavorum saepe figuras
propterea quia multa modis primordia multis
mixta suo celant in corpore saepe parentis,
quae patribus patres tradunt ab stirpe profecta;
inde Venus varia producit sorte figuras

Lamb. 1198 *possent*. Lach. reads *possunt*, and refers *quod illorum subat* to the male. 1200 *salientum* Mar. Ald. 1 Junt. for *sallentum*. *retractat* Lamb. ed. 2 and 3 first for *retractant*. 1201 *etiam* om. Nicc. Flor. 31 Camb. 2 Vat. Brix. Ver. Ven. *memi* one Vat. *illos* 2 Vat. *etiam* of AB rightly added by Pont. and Avanc. 1202 *vinclis* Mar. Ald. 1 Junt. for *vinciis*. 1203 *quam* Lach. for *cum*. *quin* Mar. Junt. Lamb. ed. 1 and 2. *non saepe* Lamb. ed. 3, Creech. 1204 (1210) first brought here by Nauger. 1207 *lacere* Lamb. and above 1146 *laciamur*, without cause. 1209 *semine*. *semen* would simplify the constr. 1210 *vim vicit* Salmasius for *vi mulcit*: a certain correction, which Wak. and Lach. justly adopt: the older readings are not worth mentioning; Lamb. in vain tries to extricate himself: it appears from 500 instances that in our archetype, as in other mss. written in square capitals, *l* and *i* were often undistinguishable: 824 *errore multareque*, I 659 *ver aula* AB. 1220 *multa modis* Lamb. ed. 2 and 3 for *multimodis*; and, although Junt. has *multimodis* in the text, it would appear from his note at the end that Candidus intended to print

maiorumque refert voltus vocesque comasque.
1227 et muliebre oritur patrio de semine saeclum
maternoque mares existunt corpore creti;
1225 quandoquidem nilo magis haec *de* semine certo
fiunt quam facies et corpora membraque nobis;
semper enim partus duplici de semine constat,
atque utri similest magis id quodcumque creatur,
eius habet plus parte aequa; quod cernere possis,
sive virum suboles sivest muliebris origo.

Nec divina satum genitalem numina cuiquam
absterrent, pater a gnatis ne dulcibus umquam
appelletur et ut sterili Venere exigat aevom;
quod plerumque putant et multo sanguine maesti
conspergunt aras adolentque altaria donis,
ut gravidas reddant uxores semine largo.
nequiquam divom numen sortisque fatigant.
nam steriles nimium crasso sunt semine partim
et liquido praeter iustum tenuique vicissim.
tenve locis quia non potis est adfigere adhaesum,
liquitur extemplo et revocatum cedit abortu.
crassius his porro quoniam concretius aequo
mittitur, aut non tam prolixo provolat ictu
aut penetrare locos aeque nequit aut penetratum
aegre admiscetur muliebri semine semen.
nam multum harmoniae Veneris differre videntur.
atque alias alii complent magis ex aliisque
succipiunt aliae pondus magis inque gravescunt.
et multae steriles Hymenaeis ante fuerunt
pluribus et nactae post sunt tamen unde puellos
suscipere et partu possent ditescere dulci.
et quibus ante domi fecundae saepe nequissent
uxores parere, inventast illis quoque compar
natura, ut possent gnatis munire senectam.

multa modis. 1222 *ab* Lach. for *a.* 1225 1226 (1227 1228) I have transferred hither, the sense requiring the change. 1227 *de* added by Flor. 31 Pont. Mar. Junt. *a* Avanc. *magis. minus* Lamb. followed by all before Lach.
1230 *quodcunque* Flor. 31 Camb. Ver. Ven. Mar. for *quocumque.*
1234 *pater a gnatis* Brix.?, Pont. Mar. Ald. 1 Junt. for *praeter agnatis.*
1243 *cedit* Pont. Mar. Ald. 1 Junt. for *credit.* 1244 *his* Lach. for *hic.* 1252 *post sunt* Lamb. first for *possunt*; though Lucr. perhaps wrote

usque adeo magni refert, ut semina possint
seminibus commisceri genitaliter apta,
crassane conveniant liquidis et liquida crassis.
atque in eo refert quo victu vita colatur;
namque aliis rebus concrescunt semina membris
atque aliis extenvantur tabentque vicissim.
et quibus ipsa modis tractetur blanda voluptas,
id quoque permagni refert; nam more ferarum
quadrupedumque magis ritu plerumque putantur
concipere uxores, quia sic loca sumere possunt,
pectoribus positis, sublatis semina lumbis.
nec molles opu' sunt motus uxoribus hilum.
nam mulier prohibet se concipere atque repugnat,
clunibus ipsa viri Venerem si laeta retractat
atque exossato ciet omni pectore fluctus;
eicit enim sulcum recta regione viaque
vomeris atque locis avertit seminis ictum.
idque sua causa consuerunt scorta moveri,
ne complerentur crebro gravidaeque iacerent
et simul ipsa viris Venus ut concinnior esset;
coniugibus quod nil nostris opus esse videtur.

Nec divinitus interdum Venerisque sagittis
deteriore fit ut forma muliercula ametur.
nam facit ipsa suis interdum femina factis
morigerisque modis et munde corpore culto,
ut facile insuescat *te* secum degere vitam.
quod superest, consuetudo concinnat amorem;
nam leviter quamvis quod crebro tunditur ictu,
vincitur in longo spatio tamen atque labascit.
nonne vides etiam guttas in saxa cadentis
umoris longo in spatio pertundere saxa?

pos sunt: comp. 1186 *poscaenia.* 1259 *Crassane* Ed. for *Crassaque*; as *refert conveniant* does not seem Latin any more than III 868 *differre fuerit*, and *que* is quite superfluous. *conveniant* Mar. Ald. 1 Junt. for *conveniunt.* 1262 *aliis* Ver. Ven. Mar. for *alii.* 1268 *Nec* Pont. Mar. Ald. 1 Junt. for *Ne. Non* Camb. 1270 *retractat* B. *retractet* A and all other mss. and eds. before Lach. 1281 *modis* Pont. Mar. Junt. for *moris.* 1282 *te secum* Bern. for *secum. secum nos* Lach. *vir secum* Flor. 31 Camb. vulg. 'Italice magis quam Latine' says Lach.

T. LUCRETI CARI

DE RERUM NATURA

LIBER QUINTUS

Quis potis est dignum pollenti pectore carmen
condere pro rerum maiestate hisque repertis?
quisve valet verbis tantum qui fingere laudes
pro meritis eius possit qui talia nobis
pectore parta suo quaesita*que* praemia liquit?
nemo, ut opinor, erit mortali corpore cretus.
nam si, ut ipsa petit maiestas cognita rerum,
dicendum est, deus ille fuit, deus, inclyte Memmi,
qui princeps vitae rationem invenit eam quae
nunc appellatur sapientia, quique per artem
fluctibus e tantis vitam tantisque tenebris
in tam tranquillo et tam clara luce locavit.
confer enim divina aliorum antiqua reperta.
namque Ceres fertur fruges Liberque liquoris
vitigeni laticem mortalibus instituisse;
cum tamen his posset sine rebus vita manere,
ut fama est aliquas etiam nunc vivere gentis.
at bene non poterat sine puro pectore vivi;
quo magis hic merito nobis deus esse videtur,
ex quo nunc etiam per magnas didita gentis
dulcia permulcent animos solacia vitae.
Herculis antistare autem si facta putabis,
longius a vera multo ratione ferere.
quid Nemeaeus enim nobis nunc magnus hiatus

2 *maiestate hisque repertis* Lamb. for *maiestatis atque repertis*: he proposes also *maiestate atque r.* *maiestatisque repertis* Nicc. and all before Lamb. 12 *locavit*

ille leonis obesset et horrens Arcadius sus?
denique quid Cretae taurus Lernaeaque pestis
hydra venenatis posset vallata colubris?
quidve tripectora tergemini vis Geryonai
. . . .
30 tanto opere officerent nobis Stymphala colentes
29 et Diomedis equi spirantes naribus ignem
Thracis Bistoniasque plagas atque Ismara propter?
aureaque Hesperidum servans fulgentia mala,
asper, acerba tuens, immani corpore serpens
arboris amplexus stirpem quid denique obesset
propter Atlanteum litus pelageque sonora,
quo neque noster adit quisquam nec barbarus audet?
cetera de genere hoc quae sunt portenta perempta,
sei non victa forent, quid tandem viva nocerent?
nil, ut opinor: ita ad satiatem terra ferarum
nunc etiam scatit et trepido terrore repleta est
per nemora ac montes magnos silvasque profundas;
quae loca vitandi plerumque est nostra potestas.
at nisi purgatumst pectus, quae proelia nobis
atque pericula tumst ingratis insinuandum!
quantae tum scindunt hominem cuppedinis acres
sollicitum curae quantique perinde timores!
quidve superbia spurcitia ac petulantia? quantas

Nicc. for *vocavit*. 29 foll. Mar. Ald. 1 Junt. and all succeeding eds. invert 30 and 31; I transpose 29 and 30: again Mar. Ald. 1 Junt. and all before Lach. insert between *nobis* and *Stymphala* the words *uncisque timendae Unguibus Arcadiae volucres*. Lach. weakly reads *et aves* for *nobis*. I have no doubt a verse has fallen out before 29 (30), beginning with *Quid*: such for instance as this *Quid volucres pennis aeratis invia stagna*. 31 *Thracis* Ed. for *Thracia*. *Thracam* Lach. *Thracen* Ald. 1 Junt.: see Camb. Journ. of phil. I p. 44. 34 *stirpem* Mon. Nauger. (*stipem* Mar. Junt.) for *stirpes*. 35 *Atlanteum* Gif. (*Atlantaeum* Lamb. and Turneb. first) for *Atianeum*. *Oceanum propter* Nicc. followed by many: *Oceanum* was probably written in the margin of Poggio's ms. to explain *Atlanteum*. *pelageque* Lamb. for *pelagique*. *sonora* Nicc. (not Flor. 31 or Camb.) Mon. Brix. Ver. Ven. Ald. 1 Junt. Nauger. Lach. for *severa*: it was probably in Poggio's ms.: Pont. in marg. 'alii *severa*'. 38 *Sei* Lach. *Si* Nicc. for *Sed*. 44 *tumst* Lach. for *sunt*. *tunc* Lamb. Gif. ed. 1. Lamb. ed. 3 remarks 'hunc locum Zoilus...secutus est tacitus et dissimulans, tamquam integrum in aliis libris repertum et non a me emendatum': Gif. then ed. 2 reads *pericula est*, and says 'sic scripsi. in o. v. *sunt*. Marull. et vulg. *tunc*': now when Lamb. had so pointedly drawn attention to it, Gif. must have been a most impudent liar, if he did not find *tunc* in Marullus' ms.

efficiunt clades! quid luxus desidiaeque?
haec igitur qui cuncta subegerit ex animoque
expulerit dictis, non armis, nonne decebit
hunc hominem numero divom dignarier esse?
cum bene praesertim multa ac divinitus ipsis
immortalibu' de divis dare dicta suërit
atque omnem rerum naturam pandere dictis.

Cuius ego ingressus vestigia dum rationes
persequor ac doceo dictis, quo quaeque creata
foedere sint, in eo quam sit durare necessum
nec validas valeant aevi rescindere leges,
quo genere in primis animi natura reperta est
nativo primum consistere corpore creta
nec posse incolumis magnum durare per aevom,
sed simulacra solere in somnis fallere mentem,
cernere cum videamur eum quem vita reliquit,
quod superest, nunc huc rationis detulit ordo,
ut mihi mortali consistere corpore mundum
nativomque simul ratio reddunda sit esse;
et quibus ille modis congressus materiai
fundarit terram caelum mare sidera solem
lunaique globum; tum quae tellure animantes
extiterint, et quae nullo sint tempore natae;
quove modo genus humanum variante loquella
coeperit inter se vesci per nomina rerum;
et quibus ille modis divom metus insinuarit
pectora, terrarum qui in orbi sancta tuetur
fana lacus lucos aras simulacraque divom.
praeterea solis cursus lunaeque meatus
expediam qua vi flectat natura gubernans;
ne forte haec inter caelum terramque reamur
libera sponte sua cursus lustrare perennis
morigera ad fruges augendas atque animantis,
neve aliqua divom volvi ratione putemus.
nam bene qui didicere deos securum agere aevom,

notes; though Mon. has no trace of it. Junt. reads *sunt*. 51 *numero divom*. *divum numero* Lactant. 53 *Immortalibus* Flor. 31 Mar. *Inmortalibus* B Camb. *Iam mortalibus* A Nicc. etc. *de* Lamb. for *e*. 61 *incolumis* Mar. Junt. for *incolumen* A, *vinculum est* B, *incolumē* Camb. 71 *Quove*. *Quoque* Nonius, contrary to

si tamen interea mirantur qua ratione
quaeque geri possint, praesertim rebus in illis
quae supera caput aetheriis cernuntur in oris,
rursus in antiquas referuntur religiones
et dominos acris adsciscunt, omnia posse
quos miseri credunt, ignari quid queat esse,
quid nequeat, finita potestas denique cuique
quanam sit ratione atque alte terminus haerens.

Quod superest, ne te in promissis plura moremur,
principio maria ac terras caelumque tuere;
quorum naturam triplicem, tria corpora, Memmi,
tris species tam dissimilis, tria talia texta,
una dies dabit exitio, multosque per annos
sustentata ruet moles et machina mundi.
nec me animi fallit quam res nova miraque menti
accidat exitium caeli terraeque futurum,
et quam difficile id mihi sit pervincere dictis;
ut fit ubi insolitam rem adportes auribus ante
nec tamen hanc possis oculorum subdere visu
nec iacere indu manus, via qua munita fidei
proxima fert humanum in pectus templaque mentis.
sed tamen effabor. dictis dabit ipsa fidem res
forsitan et graviter terrarum motibus ortis
omnia conquassari in parvo tempore cernes.
quod procul a nobis flectat fortuna gubernans,
et ratio potius quam res persuadeat ipsa
succidere horrisono posse omnia victa fragore.

[Qua prius adgrediar quam de re fundere fata
sanctius et multo certa ratione magis quam
Pythia quae tripode a Phoebi lauroque profatur,
multa tibi expediam doctis solacia dictis;
religione refrenatus ne forte rearis
terras et solem et caelum, mare sidera lunam,
corpore divino debere aeterna manere,
propterea que putes ritu par esse Gigantum
pendere eos poenas inmani pro scelere omnis
qui ratione sua disturbent moenia mundi

the use of Lucr. 114 *Religione* Nicc. Ver. Ven. *Relligione* AB in this place only, Flor. 31 Camb. Mon. 116 *manere* Junt. for *meare*. 117 *par* Mar. Junt.

praeclarumque velint caeli restinguere solem
inmortalia mortali sermone notantes;
quae procul usque adeo divino a numine distent,
inque deum numero quae sint indigna videri,
notitiam potius praebere ut posse putentur
quid sit vitali motu sensuque remotum.
quippe etenim non est, cum quovis corpore ut esse
posse animi natura putetur consiliumque;
sicut in aethere non arbor, non aequore salso
nubes esse queunt neque pisces vivere in arvis
nec cruor in lignis neque saxis sucus inesse.
certum ac dispositumst ubi quicquit crescat et insit.
sic animi natura nequit sine corpore oriri
sola neque a nervis et sanguine longiter esse.
quod si (posset enim multo prius) ipsa animi vis
in capite aut umeris aut imis calcibus esse
posset et innasci quavis in parte, soleret
tandem in eodem homine atque in eodem vase manere.
quod quoniam nostro quoque constat corpore certum
dispositumque videtur ubi esse et crescere possit
seorsum anima atque animus, tanto magis infitiandum
totum posse extra corpus formamque animalem
putribus in glebis terrarum aut solis *in* igni
aut in aqua durare aut altis aetheris oris.
haud igitur constant divino praedita sensu,
quandoquidem nequeunt vitaliter esse animata.

Illud item non est ut possis credere, sedes
esse deum sanctas in mundi partibus ullis.
tenvis enim natura deum longeque remota
sensibus ab nostris animi vix mente videtur;
quae quoniam manuum tactum suffugit et ictum,
tactile nil nobis quod sit contingere debet.
tangere enim non quit quod tangi non licet ipsum.
quare etiam sedes quoque nostris sedibus esse
dissimiles debent, tenues de corpore eorum;

for *pars*: comp. 881. 122 *a numine distent* Flor. 31 Camb. Brix. Mar. for *animinbistent. animilastent* Nicc. 133 *longiter. longius* mss.: see III 789.
134 foll.: see III 790 foll. 152 *quod* Mar. Junt. for *quod si.* 154 *de corpore. pro corpore* Lamb. conj. and Ed. in ed. 1: see notes 2. *tenuest si corpu'*

quae tibi posterius largo sermone probabo.
dicere porro hominum causa voluisse parare
praeclaram mundi naturam proptereaque
adlaudabile opus divom laudare decere
aeternumque putare atque inmortale futurum
nec fas esse, deum quod sit ratione vetusta
gentibus humanis fundatum perpetuo aevo,
solicitare suis ulla vi ex sedibus umquam
nec verbis vexare et ab imo evertere summa,
cetera de genere hoc adfingere et addere, Memmi,
desiperest. quid enim inmortalibus atque beatis
gratia nostra queat largirier emolumenti,
ut nostra quicquam causa gerere adgrediantur?
quidve novi potuit tanto post ante quietos
inlicere ut cuperent vitam mutare priorem?
nam gaudere novis rebus debere videtur
cui veteres obsunt; sed cui nil accidit aegri
tempore in anteacto, cum pulchre degeret aevom,
quid potuit novitatis amorem accendere tali?
175 an, credo, in tenebris vita ac maerore iacebat,
donec diluxit rerum genitalis origo.
174 quidve mali fuerat nobis non esse creatis?
177 natus enim debet quicumque est velle manere
in vita, donec retinebit blanda voluptas.
qui numquam vero vitae gustavit amorem
nec fuit in numero, quid obest non esse creatum?
exemplum porro gignundis rebus et ipsa
notities divis hominum unde est insita primum
quid vellent facere ut scirent animoque viderent,
quove modost umquam vis cognita principiorum
quidque inter sese permutato ordine possent,
si non ipsa dedit specimen natura creandi?
namque ita multa modis multis primordia rerum

deorum Lach. *tenues ceu corpora eorum* Ed. in small ed. 162 *ulla vi ex. ullum de* Lamb. Creech etc. most gratuitously. 163 *summa. summam* Lamb. etc.
174 175 (175 176) rightly placed by Lamb. before 176 (174): but for *credo*, which can scarcely be right, I propose *crepera.* Lach. whom I followed formerly, puts them before 170, and reads *At* for *An* in 174. 182 *divis hominum unde est* Ed. for *hominum divis unde est. hominum dis unde est* Wak. Lach. *est* om. Mar. Ald. 1 Junt. Lamb. etc. *divisum deest* Nicc. Mon. Ver. Ven. 185 *sese* Brix.

ex infinito iam tempore percita plagis
ponderibusque suis consuerunt concita ferri
omnimodisque coire atque omnia pertemptare,
quaecumque inter se possent congressa creare,
ut non sit mirum si in talis disposituras
deciderunt quoque et in talis venere meatus,
qualibus haec rerum geritur nunc summa novando.
  Quod *si* iam rerum ignorem primordia quae sint,
hoc tamen ex ipsis caeli rationibus ausim
confirmare aliisque ex rebus reddere multis,
nequaquam nobis divinitus esse paratam
naturam rerum; tanta stat praedita culpa.
principio quantum caeli tegit impetus ingens,
inde avidei partem montes silvaeque ferarum
possedere, tenent rupes vastaeque paludes
et mare quod late terrarum distinet oras.
inde duas porro prope partis fervidus ardor
adsiduusque geli casus mortalibus aufert.
quod superest arvi, tamen id natura sua vi
sentibus obducat, ni vis humana resistat
vitai causa valido consueta bidenti
ingemere et terram pressis proscindere aratris.
si non fecundas vertentes vomere glebas
terraique solum subigentes cimus ad ortus,
sponte sua nequeant liquidas existere in auras,
et tamen interdum magno quaesita labore
cum iam per terras frondent atque omnia florent,
aut nimiis torret fervoribus aetherius sol
aut subiti peremunt imbris gelidaeque pruinae,
flabraque ventorum violento turbine vexant.
praeterea genus horriferum natura ferarum
humanae genti infestum terraque marique
cur alit atque auget? cur anni tempora morbos
adportant? quare mors immatura vagatur?

Pont. Mar. for *se*. 186 *specimen* Pius in notes for *speciem*. 187 *multa modis* Lamb. ed. 1 and 2 rightly for *multimodis*; but ed. 3 again *multimodis*: see 422. 191 *possent* for *possint* Lach. rightly, as 426. 193 *meatus* Flor. 31 Mar. for *maestus*. 195 *si* added by Mar. Ald. 1 Junt. 201 *avidei partem* Ed. for *avidam partem*. *avide* Bern. *aliquam* Lach. 'Marull. *aliam* pessime'

tum porro puer, ut saevis proiectus ab undis
navita, nudus humi iacet, infans, indigus omni
vitali auxilio, cum primum in luminis oras
nixibus ex alvo matris natura profudit,
vagituque locum lugubri complet, ut aecumst
cui tantum in vita restet transire malorum.
at variae crescunt pecudes armenta feraeque
nec crepitacillis opus est nec cuiquam adhibendast
almae nutricis blanda atque infracta loquella
nec varias quaerunt vestes pro tempore caeli,
denique non armis opus est, non moenibus altis,
qui sua tutentur, quando omnibus omnia large
tellus ipsa parit naturaque daedala rerum.]
  Principio quoniam terrai corpus et umor
aurarumque leves animae calidique vapores,
e quibus haec rerum consistere summa videtur,
omnia nativo ac mortali corpore constant,
debet eodem omnis mundi natura putari.
quippe etenim quorum partis et membra videmus
corpore nativo ac mortalibus esse figuris,
haec eadem ferme mortalia cernimus esse
et nativa simul. quapropter maxima mundi
cum videam membra ac partis consumpta regigni,
scire licet caeli quoque item terraeque fuisse
principiale aliquod tempus cladenque futuram.
  Illud in his rebus ne corripuisse rearis
me mihi, quod terram atque ignem mortalia sumpsi
esse neque umorem dubitavi aurasque perire
atque eadem gigni rursusque augescere dixi,
principio pars terrai nonnulla, perusta
solibus adsiduis, multa pulsata pedum vi,

Gif.: Junt. as Ald. 1 has *aridam*: but in marg. of Mon. '*aridam partem*' is noted as strange. 227 *restet transire* Lactant. and Nicc. for *re et transirest*, that curiously frequent blunder of AB: see IV 783. 239 *eodem omnis* Gif. rightly for *eadem omnis*, and before him the Paris ed. of Pius. *tota eadem* Lamb. 241 *nativo ac mortalibus* Lach. for *nativom mortalibus*: not Naugerius who has *nativo mortalibus*. *nativo et mortalibus* Avanc. in notes at end of his Catullus, and vulg. *nativo in mortalibus* Mar. 245 *item* Bentl. for *idem*. 248 *Me mihi* B most rightly. *Memini* A. *Memmi* vulg.: hence Lamb. *me arripuisse* for *corripuisse* in 247. 251 *non nulla* Nicc. Camb. Ver. Ven. Mar. for *non ulla*. 257 *alid*

pulveris exhalat nebulam nubesque volantis
quas validi toto dispergunt aere venti.
pars etiam glebarum ad diluviem revocatur
imbribus et ripas radentia flumina rodunt.
praeterea pro parte sua, quodcumque alid auget,
redditur; et quoniam dubio procul esse videtur
omniparens eadem rerum commune sepulcrum,
ergo terra tibi libatur et aucta recrescit.

Quod superest, umore novo mare flumina fontes
semper abundare et latices manare perennis
nil opus est verbis: magnus decursus aquarum
undique declarat. sed primum quicquid aquai
tollitur in summaque fit ut nil umor abundet,
partim quod validi verrentes aequora venti
diminuunt radiisque retexens aetherius sol,
partim quod supter per terras diditur omnis;
percolatur enim virus retroque remanat
materies umoris et ad caput amnibus omnis
convenit, inde super terras fluit agmine dulci
qua via secta semel liquido pede detulit undas.

Aera nunc igitur dicam qui corpore toto
innumerabiliter privas mutatur in horas.
semper enim, quodcumque fluit de rebus, id omne
aeris in magnum fertur mare; qui nisi contra
corpora retribuat rebus recreetque fluentis,
omnia iam resoluta forent et in aera versa.
haut igitur cessat gigni de rebus et in res
reccidere, adsidue quoniam fluere omnia constat.

Largus item liquidi fons luminis, aetherius sol,
inrigat adsidue caelum candore recenti
suppeditatque novo confestim lumine lumen.
nam primum quicquid fulgoris disperit ei,
quocumque accidit. id licet hinc cognoscere possis,
quod simul ac primum nubes succedere soli
coepere et radios inter quasi rumpere lucis,
extemplo inferior pars horum disperit omnis

Lamb. ed. 1 and 2 for *alit* rightly; ed. 3 he restores *alit*. 258 *Redditur*. *Roditur* Mar. Junt. Lamb. vulgo before Wak. 282 *recenti* B corr. Flor. 31 Camb. Mon. for *regenti*. 288 *disperit* Nicc. B corr. for *disperis*. 291

terraque inumbratur qua nimbi cumque feruntur;
ut noscas splendore novo res semper egere
et primum iactum fulgoris quemque perire
nec ratione alia res posse in sole videri,
perpetuo ni suppeditet lucis caput ipsum.
quin etiam nocturna tibi, terrestria quae sunt,
lumina, pendentes lychini claraeque coruscis
fulguribus pingues multa caligine taedae
consimili properant ratione, ardore ministro,
suppeditare novom lumen, tremere ignibus instant,
instant, nec loca lux inter quasi rupta relinquit:
usque adeo properanter ab omnibus ignibus ei
exitium celeri celatur origine flammae.
sic igitur solem lunam stellasque putandum*st*
ex alio atque alio lucem iactare subortu
et primum quicquid flammarum perdere semper:
inviolabilia haec ne credas forte vigere.

Denique non lapides quoque vinci cernis ab aevo,
non altas turris ruere et putrescere saxa,
non delubra deum simulacraque fessa fatisci,
nec sanctum numen fati protollere finis
posse neque adversus naturae foedera niti?
denique non monimenta virum dilapsa videmus
quaerere proporro sibi *sene* senescere credas,

Et Mar. Ald. 1 Junt. for *Ut*. 295 *lychini* Ed. for *lyclini*. *lychni* A corr. Nicc. Macrob.: Lucr. seems to have known only the trisyllabic form, whether he wrote *lychini* or *luchini* or *lichini*; or even one of the still older forms *lucini* or *licini*. Ritschl in Rhein. Mus. n. f. x p. 447—451 shews that Enn. ann. 328 wrote *lucinorum lumina bis sex*; Lucilius *lucinosque* or *luchinosque*: so *dracuma mina* (μνᾶ), *tecina* (τέχνη), *cŭcĭnus* or *cicinus* (κίκνος), and other like forms all arising from the dislike of the old Latins to certain combinations of consonants: comp. *Aesculapius Alcumena Hercules* and many such like. Lucr. or his editor may have written *y*, as it was introduced for Greek words just before his death: the aspirated *ch* was in common use some 40 years earlier, as Ritschl proves. 296 *caligine*. *fuligine* Bentl. and Wak. from a sheer misunderstanding of Lucr. 297 *properant* Mar. Ald. 1 Junt. for *proferant*. 300 *ab omnibus*. *obortis* Bruno (Harburg 1872, p. 9). 301 *celeri celatur* Mar. Madvig and Lach. for *celeri celeratur*. *toleratur* Nicc. Ver. Ven. Ald. 1 vulg. Junt. keeps the *celeratur* of Mon., Candidus not having observed that Marullus had put points of rejection under the *er*. 302 *putandumst* Lach. for *putandum*: see I 111. 312 *sene senescere* Ed. for *cumque senescere*: see Journ. of phil. n. s. IV p. 122 and notes 2. *sibi qui de se quoque dicat* Polle. *Aeraque proporro solidumque senescere ferrum* Ed. formerly: see Camb. Journ. of phil. I p. 373 and IV p. 142. *Quae fore*

non ruere avolsos silices a montibus altis
nec validas aevi vires perferre patique
finiti? neque enim caderent avolsa repente,
ex infinito quae tempore pertolerassent
omnia tormenta aetatis privata fragore.
Denique iam tuere hoc, circum supraque quod omnem
continet amplexu terram: si procreat ex se
omnia, quod quidam memorant, recipitque perempta,
totum nativum mortali corpore constat.
nam quodcumque alias ex se res auget alitque,
deminui debet, recreari, cum recipit res.
Praeterea si nulla fuit genitalis origo
terrarum et caeli semperque aeterna fuere,
cur supera bellum Thebanum et funera Troiae
non alias alii quoque res cecinere poetae?
quo tot facta virum totiens cecidere neque usquam
aeternis famae monimentis insita florent?
verum, ut opinor, habet novitatem summa recensque
naturast mundi neque pridem exordia cepit.
quare etiam quaedam nunc artes expoliuntur,
nunc etiam augescunt; nunc addita navigiis sunt
multa, modo organici melicos peperere sonores.
denique natura haec rerum ratioque repertast
nuper, et hanc primus cum primis ipse repertus
nunc ego sum in patrias qui possim vertere voces.
quod si forte fuisse antehac eadem omnia credis,
sed periisse hominum torrenti saecla vapore,
aut cecidisse urbis magno vexamine mundi,
aut ex imbribus adsiduis exisse rapaces
per terras amnes at*que* oppida cooperuisse,

proporro vetitumque senescere credas Lach. *Cedere proporro subitoque senescere casu* Mar. Junt. Lamb. ed. 1 and 2, Creech. Lamb. ed. 3 obelises this and adds the ms. verse. Is. Voss. (not Preiger) in ms. notes has *Quae ruere proporro ibi conque senescere credas.* [*Quare proporro sibi cumque senescere credas*] Bern.: Gif. and Wak. find no difficulty in the ms. reading. 318 *omnem* Mar. Junt. for *omne.* 319 *si* om. Nicc. and all later mss.: hence much confusion in eds. before Lach., Havercamp not deigning to record that AB both had *si.* *omne...terrai* Avanc. *terram, quod* Mar. Junt. vulg. 321 *nativum. nativo ac* Bern. 331 *Naturast mundi* Ald. 1, *Natura est* Mar. Junt. for *Natura mundist*: this common blunder of our mss. Wak. here keeps. 339 *periisse* Flor. 31 for *perisse.* 342 *atque oppida* Flor. 31 Camb. Mar. for *at oppida.* *ac* Nicc. 2 Vat.

tanto quique magis victus fateare necessest
exitium quoque terrarum caelique futurum.
nam cum res tantis morbis tantisque periclis
temptarentur, ibi si tristior incubuisset
causa, darent late cladem magnasque ruinas.
nec ratione alia mortales esse videmur,
inter nos nisi quod morbis aegrescimus isdem
atque illi quos a vita natura removit.
Praeterea quaecumque manent aeterna necessust
aut, quia sunt solido cum corpore, respuere ictus
nec penetrare pati sibi quicquam quod queat artas
dissociare intus partis, ut materiai
corpora sunt quorum naturam ostendimus ante,
aut ideo durare aetatem posse per omnem,
plagarum quia sunt expertia, sicut inane est
quod manet intactum neque ab ictu fungitur hilum,
aut etiam quia nulla loci fit copia circum,
quo quasi res possint discedere dissoluique,
sicut summarum summa est aeterna neque extra
qui locus est quo dissiliant neque corpora sunt quae
possint incidere et valida dissolvere plaga.
at neque, uti docui, solido cum corpore mundi
naturast, quoniam admixtumst in rebus inane,
nec tamen est ut inane, neque autem corpora desunt,
ex infinito quae possint forte coorta
corruere hanc rerum violento turbine summam
aut aliam quamvis cladem inportare pericli,
nec porro natura loci spatiumque profundi
deficit, exspargi quo possint moenia mundi,
aut alia quavis possunt vi pulsa perire.
haut igitur leti praeclusa est ianua caelo
nec soli terraeque neque altis aequoris undis,
sed patet immani et vasto respectat hiatu.
quare etiam nativa necessumst confiteare
haec eadem; neque enim, mortali corpore quae sunt

Brix. Ver. Ven. Wak. 349 *isdem* Pius in notes, Lamb. for *idem* which Lach. keeps: see II 693. Lach. was the first to join *inter nos* with what follows. 359 *fit* Lach. first for *sit.* 367 *coorta* Mar. Ald. 1 Junt. for *coperta.* 368 *Corruere.* *Proruere* Lamb. etc. 375 *immani.* *immane* Bruno l. l. p. 10: he

ex infinito iam tempore adhuc potuissent
inmensi validas aevi contemnere vires.
  Denique tantopere inter se cum maxima mundi
pugnent membra, pio nequaquam concita bello,
nonne vides aliquam longi certaminis ollis
posse dari finem? vel cum sol et vapor omnis
omnibus epotis umoribus exsuperarint:
quod facere intendunt, neque adhuc conata patrantur:
tantum suppeditant amnes ultraque minantur
omnia diluviare ex alto gurgite ponti,
nequiquam, quoniam verrentes aequora venti
deminuunt radiisque retexens aetherius sol,
et siccare prius confidunt omnia posse
quam liquor incepti possit contingere finem.
tantum spirantes aequo certamine bellum
magnis *inter se* de rebus cernere certant,
cum semel interea fuerit superantior ignis
et semel, ut fama est, umor regnarit in arvis.
ignis enim superat et lambens multa perussit,
avia cum Phaethonta rapax vis solis equorum
aethere raptavit toto terrasque per omnis.
at pater omnipotens ira tum percitus acri
magnanimum Phaethonta repenti fulminis ictu
deturbavit equis in terram, solque cadenti
obvius aeternam succepit lampada mundi
disiectosque redegit equos iunxitque trementis,
inde suum per iter recreavit cuncta gubernans,
scilicet ut veteres Graium cecinere poetae.
quod procul a vera nimis est ratione repulsum.
ignis enim superare potest ubi materiai
ex infinito sunt corpora plura coorta;
inde cadunt vires aliqua ratione revictae,
aut pereunt res exustae torrentibus auris.

thinks that 369 and 372 are interpolations. 382 *certaminis ollis* Flor. 31 Camb. Mar. for *certamini solis*. 385 *patrantur*. *patrarunt* Goebel. 386 *ultraque*. *ultroque* Flor. 31 Camb. Mar. vulg. 393 *inter se* inserted by Lach. before, by Nicc. Flor. 31 Camb. Mon. vulg. after *de rebus*. 396 *superat* (perf.) *et lambens* Lach. for *superavit et ambens*. *lambens* B corr.: nor has *ambens* any existence, whether as partic. of *ambedo* or *ambio*. 399 *tum* Flor. 31 Camb. Mar. for *cum*. 405 *Graium* Flor. 31 Camb. Pont. Mar. for

umor item quondam coepit superare coortus,
ut fama est, hominum multas quando obruit urbis.
inde ubi vis aliqua ratione aversa recessit,
ex infinito fuerat quaecumque coorta,
constiterunt imbres et flumina vim minuerunt.
  Sed quibus ille modis coniectus materiai
fundarit terram et caelum pontique profunda,
solis lunai cursus, ex ordine ponam.
nam certe neque consilio primordia rerum
ordine se suo quaeque sagaci mente locarunt
nec quos quaeque darent motus pepigere profecto,
sed quia multa modis multis primordia rerum
ex infinito iam tempore percita plagis
ponderibusque suis consuerunt concita ferri
omnimodisque coire atque omnia pertemptare,
quaecumque inter se possent congressa creare,
propterea fit uti magnum volgata per aevom
omne genus coetus et motus experiundo
tandem conveniant ea quae convecta repente
magnarum rerum fiunt exordia saepe,
terrai maris et caeli generisque animantum.
  Hic neque tum solis rota cerni lumine largo
altivolans poterat nec magni sidera mundi
nec mare nec caelum nec denique terra neque aer
nec similis nostris rebus res ulla videri,
sed nova tempestas quaedam molesque coorta
omne genus de principiis, discordia quorum
intervalla vias conexus pondera plagas
concursus motus turbabat proelia miscens,

gratum. *graium* (*gratum*) Ver. Ven. 409 410 Lach. by a strange misapprehension inverts these verses and for *Aut pereunt* reads *Et pereunt*. 412 *urbis* Pont. Junt. for *undis*. Flor. 31 Camb. Ver. Ven. Mar. etc. keep *undis*, and for *hominum multas* read *hominum multos*. 428 *Omne genus* Lach. for *Omnigenus*. *Omnigenos* A corr. vulg. 429 *convecta* Lach. for *conventa*. *T. c. quae ubi convenere* Lamb. ed. 1; *T. ea c. quae ut convenere* ed. 2 and 3, followed by Creech, etc. 430 *fiunt* Flor. 31 Camb. for *fluunt*. *saepe*. *semper*, as II 1062 Lach. 432 *largo*. *claro* Macrob. 433 *Altivolans* Pont. Avanc. and Macrob. sat. VI 2 23 for *Alte volans*. *Alta volans* Mar. Junt. 437—442 (440—445) are thus arranged by Lach. after Reisacker quaest. Lucr.; and the necessity of this change is manifest, though Macrob. l. l. evidently read them in the order in which they appear in our mss. See what I say on this and similar points p. 30. 437 *Omne genus de* Lach. as

propter dissimilis formas variasque figuras
quod non omnia sic poterant coniuncta manere
445 nec motus inter sese dare convenientis.
437 diffugere inde loci partes coepere paresque
cum paribus iungi res et discludere mundum
membraque dividere et magnas disponere partes,
446 hoc est, a terris altum secernere caelum
et sorsum mare uti secreto umore pateret,
seorsus item puri secretique aetheris ignes.

Quippe etenim primum terrai corpora quaeque,
propterea quod erant gravia et perplexa, coibant
in medio atque imas capiebant omnia sedes;
quae quanto magis inter se perplexa coibant,
tam magis expressere ea quae mare sidera solem
lunamque efficerent et magni moenia mundi.
omnia enim magis haec e levibus atque rutundis
seminibus multoque minoribu' sunt elementis
quam tellus. ideo, per rara foramina, terrae
partibus erumpens primus se sustulit aether
ignifer et multos secum levis abstulit ignis,
non alia longe ratione ac saepe videmus,
aurea cum primum gemmantis rore per herbas
matutina rubent radiati lumina solis
exhalantque lacus nebulam fluviique perennes,
ipsaque ut interdum tellus fumare videtur;
omnia quae sursum cum conciliantur, in alto
corpore concreto subtexunt nubila caelum.
sic igitur tum se levis ac diffusilis aether
corpore concreto circumdatus undique *flexit*
et late diffusus in omnis undique partis
omnia sic avido complexu cetera saepsit.
hunc exordia sunt solis lunaeque secuta,

before, for *Omnigenus e* B, *Omnigenis e* A Nicc. vulg. 446 *altum. magnum* Macr. 447 *umore* Macrob. B corr. Vat. 3276 Pont. Junt. for *umor. humorque* Nicc. Flor. 31 Camb. 4 Vat. Brix. Ver. Ven. Avanc. 458 *se* Nicc. for *et.*

459 *Ignifer. Signifer* Ver. Ven. Ald. 1 Junt. (not Mar.) Lamb. etc. on no ms. authority, though Lamb. falsely says all mss. have it. 460 463 *videmus... Exhalantque. videntur...Exalare* Lach.: a violent change which only impairs the beauty of the passage. 468 *flexit* Lach. for *saepsit*: *saepsit* has come from

interutrasque globi quorum vertuntur in auris;
quae neque terra sibi adscivit nec maximus aether,
quod neque tam fuerunt gravia ut depressa sederent,
nec levia ut possent per summas labier oras,
et tamen interutrasque ita sunt ut corpora viva
versent et partes ut mundi totius extent;
quod genus in nobis quaedam licet in statione
membra manere, tamen cum sint ea quae moveantur.
his igitur rebus retractis terra repente,
maxuma qua nunc se ponti plaga caerula tendit,
succidit et salso suffudit gurgite fossas.
inque dies quanto circum magis aetheris aestus
et radii solis cogebant undique terram
verberibus crebris extrema ad limina *in artum*,
in medio ut propulsa suo condensa coiret,
tam magis expressus salsus de corpore sudor
augebat mare manando camposque natantis,
et tanto magis illa foras elabsa volabant
corpora multa vaporis et aeris altaque caeli
densebant procul a terris fulgentia templa.
sidebant campi, crescebant montibus altis
ascensus; neque enim poterant subsidere saxa
nec pariter tantundem omnes succumbere partis.

Sic igitur terrae concreto corpore pondus
constitit atque omnis mundi quasi limus in imum

470. 471 *secuta.* '*secuta, et* Y' (i.e. our A) says Havercamp. This is quite false: though he had A and B before him, he has chosen to copy out this, as well as three fourths of his worthless various readings, from the bookseller Tonson's London ed. of 1712, which gives 'collationes trium ms. codicum Vossii a R^{do} Viro R^{to} Cannon S. T. P. factas': this collator says 'secuta, &. V. 1.' Haverc. copies even the comma and the & into his ed. This is but one of a thousand instances of his unprincipled sloth. 472 476 *Interutrasque. Interutraque* Lach. 474 *fuerunt. fuerint* Pont. Avanc. and strange to say Lamb. who made it the vulg. before Lach. 482 *salso suffudit* A corr. Lamb. for *salsos offudit. salso suffodit* Nicc. Flor. 31 Camb. Mon. etc. Wak. 485 *extrema ad limina in artum* Ed. for *extrema ad limina partem*: the scribe neglected to write *ina* twice, and to fill up the verse wrote *partem* for *rtum. extrema a limini' parte* Lach. who connects this verse with the next. *extrema ad limina apertam* Lamb. *e. a. l. raptim* Bentl. *radiis* for *radii* A Nicc. Camb. *lumina* Nicc. Flor. 31 Camb. etc. 491 *Densebant* Lamb. Lach. for *Densabant*, as our mss. in all other places make it of the 2nd conjugation: see Wagn. to Virg. geor. I 248.

confluxit gravis et subsedit funditus ut faex;
inde mare inde aer inde aether ignifer ipse
corporibus liquidis sunt omnia pura relicta,
et leviora aliis alia, et liquidissimus aether
atque levissimus aerias super influit auras,
nec liquidum corpus turbantibus aeris auris
commiscet; sinit haec violentis omnia verti
turbinibus, sinit incertis turbare procellis,
ipse suos ignis certo fert impete labens.
nam modice fluere atque uno posse aethera nisu
significat Pontos, mare certo quod fluit aestu
unum labendi conservans usque tenorem.
[Motibus astrorum nunc quae sit causa canamus.
principio magnus caeli si vortitur orbis,
ex utraque polum parti premere aera nobis
dicendum est extraque tenere et claudere utrimque:
inde alium supra fluere atque intendere eodem
quo volvenda micant aeterni sidera mundi;
aut alium supter, contra qui subvehat orbem,
ut fluvios versare rotas atque haustra videmus.
est etiam quoque uti possit caelum omne manere
in statione, tamen cum lucida signa ferantur;
sive quod inclusi rapidi sunt aetheris aestus
quaerentesque viam circum versantur et ignes
passim per caeli volvunt Summania templa;
sive aliunde fluens alicunde extrinsecus aer
versat agens ignis; sive ipsi serpere possunt
quo cuiusque cibus vocat atque invitat euntis,
flammea per caelum pascentis corpora passim.
nam quid in hoc mundo sit eorum ponere certum

503 *Commiscet* Nauger. first for *Commisci*. *haec. hic* Bentl. and Lach.; but see notes 2. 507 *Pontos, mare* Lach. for *ponto mare*. *Ponti mare* Pont. Lamb. ed. 3, *tantum mare* ed. 1 and 2. 513—516 Lach. quite misapprehends and sadly mutilates this passage: 513 he reads *deorsum* for *eodem*, 515 *Hinc* for *Aut*; and places 514 after 516: not one of these changes but mars the sense.
515 *Aut*. *Ast* Nauger. vulg. wrongly. *qui* Mar. Nauger. rightly for *quis*.
518 *lucida* Flor. 31 Ver. Ven. Mar. for *lucia*. 521 *Summania*: see notes 2. *immania* Creech in notes, Lach. Pont. says '*summania* pro *immania*'. *se immania* Avanc. in notes at end of Catullus, Lamb. perversely. I once thought of *summa avia*. 524 *euntis*. *arentis* Lach. 530 *omne* B corr. Mar. Ald. 1

difficile est; sed quid possit fiatque per omne
in variis mundis varia ratione creatis,
id doceo plurisque sequor disponere causas,
motibus astrorum quae possint esse per omne;
e quibus una tamen sit in hoc quoque causa necessest
quae vegeat motum signis; sed quae sit earum
praecipere hautquaquamst pedetemtim progredientis.]
Terraque ut in media mundi regione quiescat,
evanescere paulatim et decrescere pondus
convenit, atque aliam naturam supter habere
ex ineunte aevo coniunctam atque uniter aptam
partibus aeriis mundi quibus insita vivit.
propterea non est oneri neque deprimit auras;
ut sua cuique homini nullo sunt pondere membra
nec caput est oneri collo nec denique totum
corporis in pedibus pondus sentimus inesse;
at quaecumque foris veniunt inpostaque nobis
pondera sunt laedunt, permulto saepe minora.
usque adeo magni refert quid quaeque obeat res.
sic igitur tellus non est aliena repente
allata atque auris aliunde obiecta alienis,
sed pariter prima concepta ab origine mundi
certaque pars eius, quasi nobis membra videntur.
praeterea grandi tonitru concussa repente,
terra supra quae se sunt concutit omnia motu:
quod facere haut ulla posset ratione, nisi esset
partibus aeriis mundi caeloque revincta.
nam communibus inter se radicibus haerent
ex ineunte aevo coniuncta atque uniter apta.

Junt. for *omnem*. 531 *sit in hoc quoque causa* Ed. for *sit et haec quoque causa*. *siet haec* Lach.: but *haec* has no force and has come from the neighbouring *causa*. *siet hic* Bern. 532 *vegeat* Gif. for *vigeat*. 533 *progredientis* Lamb. for *progredientes*: *est* for *licet* is not Lucretian. 536 *supter*. *subter* Flor. 31 Mar. Junt. for *super*. 538 *vivit*. *crevit* Lach. *sidit* Lamb. ed. 2 and 3 'ex antiquae scripturae quae reperitur in codice Bertin. vestigiis', and Heins. notes that *s*, i.e. the ms. of Modius, has *sidit*, unless I mistake his meaning: but Modius made his collation with the small 2nd ed. of Lamb. so that it is probably a mere oversight; for B has *vivit*. 545 *quid quaeque obeat res* Ed. for *quit queque quaeat res*: Lach. to I 222 gives more than 40 instances in which AB change *b* to *v*: when *obeat* became *oueat*, the further corruption to *queat* was inevitable with capitals. *aveat* Lach. *vehat* Gronovius and Is. Voss. in notes. *gerat* N. P. Howard.

nonne vides etiam quam magno pondere nobis
sustineat corpus tenuissima vis animai
propterea quia tam coniuncta atque uniter apta est?
denique iam saltu pernici tollere corpus
quid potis est nisi vis animi quae membra gubernat?
iamne vides quantum tenuis natura valere
possit, ubi est coniuncta gravi cum corpore, ut aer
coniunctus terris et nobis est animi vis?

Nec nimio solis maior rota nec minor ardor
esse potest, nostris quam sensibus esse videtur.
nam quibus e spatiis cumque ignes lumina possunt
adicere et calidum membris adflare vaporem,
nil illa his intervallis de corpore libant
flammarum, nil ad speciem est contractior ignis.
573 proinde, calor quoniam solis lumenque profusum
570 perveniunt nostros ad sensus et loca mulcent,
forma quoque hinc solis debet filumque videri,
572 nil adeo ut possis plus aut minus addere, vere.
575 lunaque sive notho fertur loca lumine lustrans
sive suam proprio iactat de corpore lucem,
quidquid id est, nilo fertur maiore figura
quam, nostris oculis qua cernimus, esse videtur.
nam prius omnia, quae longe semota tuemur
aera per multum, specie confusa videntur
quam min*ui* filum. quapropter luna necesse est,
quandoquidem claram speciem certamque figuram

555 *uniter apta* Pont. Junt. for *uniter aucta*: 558 *uniter apta* for *uniter rapta* B corr. Flor. 31 Camb. etc. as 537. Mar. has first corrected Mon., then written *aucta* above, and then *apta* in marg.; unless the first correction is from Pontanus, the other from Marullus: it is more than probable that Pontanus had the cod. Victor. in his hands before Marullus: comp. 1152. 559 *pernici* Brix. Pont. Mar. Ald. 1 Junt. for *pernice*. *pernice attollere* Flor. 31: a mere conj. 560 *Quid* Lamb. in errata to ed. 3, Faber in his emend. for *Quis*. *animi* Lach. for *animae*; as 563. 563 *Coniunctus* Flor. 31 Camb. Pont. Mar. for *Coniuncta*.

567 *Adicere* (*Adiicere*) Lamb. for *Adlicere*: a confusion of which we have had so many examples. 568 *Nil illa his intervallis* Bern. for *Nihil nisi intervallis*. *Nil ea in his int.* Lach. *Illa ipsa intervalla nihil* Lamb. *Nilque nisi ex int.* Flor. 31 Camb. 3 Vat. Mar. *libant* Mar. Junt. for *librant*. *limant* Lamb. ed. 1 and 2, *librant* ed. 3. 570 (573) brought here by Mar. Ald. 1 Junt. 571 *loca mulcent* Lach. for *loca fulgent*. *loca tingunt* Lamb. 572 *filumque* Lamb. ed. 2 in notes and ed. 3 after Turnebus for *ilumque*. 574 = 571 (570). 581 *minui filum* Bentl. for *mi*

praebet, ut est oris extremis cumque notata
quantaque quantast hinc nobis videatur in alto.
postremo quoscumque vides hinc aetheris ignes:
quandoquidem quoscumque in terris cernimus *ignes*,
dum tremor *est* clarus, dum cernitur ardor eorum,
perparvom quiddam interdum mutare videtur
alteram utram in partem filum, quo longius absunt:
594 scire licet perquam pauxillo posse minores
esse vel exigua maioris parte brevique.
590 Illud item non est mirandum, qua ratione
tantulus ille queat tantum sol mittere lumen,
quod maria ac terras omnis caelumque rigando
compleat et calido perfundat cuncta vapore.
597 nam licet hinc mundi patefactum totius unum
largifluum fontem scatere atque erumpere lumen,
ex omni mundo quia sic elementa vaporis
undique conveniunt et sic coniectus eorum
confluit, ex uno capite hic ut profluat ardor.
nonne vides etiam quam late parvus aquai
prata riget fons interdum campisque redundet?
est etiam quoque uti non magno solis ab igni
aera percipiat calidis fervoribus ardor,
opportunus ita est si forte et idoneus aer,
ut queat accendi parvis ardoribus ictus;
quod genus interdum segetes stipulamque videmus
accedere ex una scintilla incendia passim.

filum. *minimum filum* Nicc. vulg. 584 *Quantaque quantast hinc* Eichstädt for *Quanto quoque quantast hinc*, and in the repetition 596 *Quanta quoque est tanta hinc*: 'qua emendatione' says Lach. 'effecit ut hic semel valde laudandus sit'. *Quantaque sit, nobis tanta hinc* Pont. Ald. 1 Junt. *Quanta haec cumque fuat, tanta hinc* Lamb. 586 *ignes* added by Mar. Ald. 1 Junt.: the *ignes* of 585 caused its omission. *horum* Flor. 31 Camb. *flammae* Lach. who says that *ignes* is an unmeaning repetition: but similar repetitions are very common in Lucr. 587 *est* added by Flor. 31 Camb. etc. 588 *videtur* A Nicc. Flor. 31 Camb. Mon. etc. and Lamb. ed. 1. *videntur* B Lamb. ed. 2 and 3, perhaps rightly. 589 *absunt* Lach. for *absit*: a necessary change. *cum longius absint* Lamb. 590 591 (594 595) first brought here by Mar. Ald. 1 Junt. 596 = 584.

598 *lumen*. *flumen* Avanc. Lamb. etc. without any authority. 599 *quia* AB. *qua* Nicc. Flor. 31 (Lach. is in error) Camb. Mon. all Vat. Brix. Ver. Ven. Ald. 1 Junt. *quo* Lamb. etc. *vaporis* Lamb. first for *vapore*. 605 *percipiat* Nauger. for *percipitat*. 609 *Accedere* A. *Accidere* B. *Accendere* A corr. Nicc. 2

forsitan et rosea sol alte lampade lucens
possideat multum caecis fervoribus ignem
circum se, nullo qui sit fulgore notatus,
aestifer ut tantum radiorum exaugeat ictum.
Nec ratio solis simplex *et* certa patescit,
quo pacto aestivis e partibus aegocerotis
brumalis adeat flexus atque inde revertens
cancri se ut vertat metas ad solstitialis,
lunaque mensibus id spatium videatur obire,
annua sol in quo consumit tempora cursu.
non, inquam, simplex his rebus reddita causast.
nam fieri vel cum primis id posse videtur,
Democriti quod sancta viri sententia ponit,
quanto quaeque magis sint terram sidera propter,
tanto posse minus cum caeli turbine ferri.
evanescere enim rapidas illius et acris
imminui supter viris, ideoque relinqui
paulatim solem cum posterioribu' signis,
inferior multo quod sit quam fervida signa.
et magis hoc lunam: quanto demissior eius
cursus abest procul a caelo terrisque propinquat,
tanto posse minus cum signis tendere cursum.
flaccidiore etenim quanto iam turbine fertur
inferior quam sol, tanto magis omnia signa
hanc adipiscuntur circum praeterque feruntur.
propterea fit ut haec ad signum quodque reverti
mobilius videatur, ad hanc quia signa revisunt.
fit quoque ut e mundi transversis partibus aer
alternis certo fluere alter tempore possit,
qui queat aestivis solem detrudere signis
brumalis usque ad flexus gelidumque rigorem,
et qui reiciat gelidis a frigoris umbris

Vat. Ver. Ven. *Accendi* Flor. 31 Camb. 3 Vat. Brix. Pont. Avanc. Nauger. *Accipere* Mar. Junt. Lamb.: see II 1025. 610 *et.* *e* Lach. who will never tolerate *et* for *etiam.* 613 *Aestifer ut tantum* Flor. 31 3 Vat. Mar. Junt. for *Aestiferi utantum* B, *utantur* A Nicc. *Aestiferum ut tantum* Avanc. Lamb. etc. *Aestiferum tantum* Nauger. 614 *simplex et certa* Ed. for *simplex recta.* *simplex nec certa* Lamb. *simplex aut recta* Flor. 31 Camb. 3 Vat. *ac recta* or *et recta* others. *simplex rellata* Lach. *reclusa* Bern. 617 *Cancri se* Lach. for *Canceris.* 632 *etenim* Lach.

aestiferas usque in partis et fervida signa.
et ratione pari lunam stellasque putandumst,
quae volvunt magnos in magnis orbibus annos,
aeribus posse alternis e partibus ire.
nonne vides etiam diversis nubila ventis
diversas ire in partis inferna supernis?
qui minus illa queant per magnos aetheris orbis
aestibus inter se diversis sidera ferri?
At nox obruit ingenti caligine terras,
aut ubi de longo cursu sol ultima caeli
impulit atque suos efflavit languidus ignis
concussos itere et labefactos aere multo,
aut quia sub terras cursum convortere cogit
vis eadem, supra quae terras pertulit orbem.
Tempore item certo roseam Matuta per oras
aetheris auroram differt et lumina pandit,
aut quia sol idem, sub terras ille revertens,
anticipat caelum radiis accendere temptans,
aut quia conveniunt ignes et semina multa
confluere ardoris consuerunt tempore certo,
quae faciunt solis nova semper lumina gigni:
quod genus Idaeis fama est e montibus altis
dispersos ignis orienti lumine cerni,
inde coire globum quasi in unum et conficere orbem.
nec tamen illud in his rebus mirabile debet
esse, quod haec ignis tam certo tempore possunt
semina confluere et solis reparare nitorem.
multa videmus enim, certo quae tempore fiunt
omnibus in rebus. florescunt tempore certo
arbusta et certo dimittunt tempore florem.
nec minus in certo dentes cadere imperat aetas
tempore et inpubem molli pubescere veste
et pariter mollem malis demittere barbam.
fulmina postremo nix imbres nubila venti

for *etiam.* 648 *illa* Flor. 31 Camb. Pont. Mar. for *ille.* 651 *sol ultima* Camb. Vat. 1136 and 1954 Othob. for *solvet ima caeli. sol extima* Flor. 31 Mar. Ald. 1 Junt. etc. Politian in marg. Flor. 29 has both *ultima* and *extima.*
656 *Matuta* Pont. Mar. Ald. 1 Junt. for *matura.* 667 *possunt* Lach. for *possit.* *possint* vulg. contrary to the unvarying usage of Lucr. 675 *Fulmina*

non nimis incertis fiunt in partibus anni.
namque ubi sic fuerunt causarum exordia prima,
atque ita res mundi cecidere ab origine prima,
consequë quoque iam redeunt ex ordine certo.
Crescere itemque dies licet et tabescere noctes,
et minui luces, cum sumant augmina noctes,
aut quia sol idem sub terras atque superne
imparibus currens amfractibus aetheris oras
partit et in partis non aequas dividit orbem,
et quod ab alterutra detraxit parte, reponit
eius in adversa tanto plus parte relatus,
donec ad id signum caeli pervenit, ubi anni
nodus nocturnas exaequat lucibus umbras.
nam, medio cursu flatus aquilonis et austri,
distinet aequato caelum discrimine metas
propter signiferi posituram totius orbis,
annua sol in quo concludit tempora serpens,
obliquo terras et caelum lumine lustrans,
ut ratio declarat eorum qui loca caeli
omnia dispositis signis ornata notarunt.
aut quia crassior est certis in partibus aer,
sub terris ideo tremulum iubar haesitat ignis
nec penetrare potest facile atque emergere ad ortus.
propterea noctes hiberno tempore longae
cessant, dum veniat radiatum insigne diei.
aut etiam, quia sic alternis partibus anni
tardius et citius consuerunt confluere ignes
qui faciunt solem certa desurgere parte,
propterea fit uti videantur dicere verum
. . . .

Mar. Ald. 1 Junt. first for *Flumina*. 679 *Consequë quoque iam redeunt* Lach. for *Consequiae quoque iam rerum*: a brilliant emendation. *Consequae* 2 Vat. Ver. Ven. *Consequa natura est iam rerum* Flor. 31 Camb. 3 Vat. Mar. vulg. *Consequitur quoque iam series* Pont. 689—693 Lach. has quite causelessly altered this passage in many points: 690 for *metas* he reads *metans* as Pont. before him: [*caeli* Mar. for *caelum*:] 692 and 693 he inverts, 693 for *obliquo* he reads *obliqui*, joining it with *orbis*: he will not have *serpens, lustrans* in apposition any more than 524 *euntis, pascentis*; or VI 1141 *veniens, ortus*, and 1260 *languens, conveniens*; though suchlike constructions are common in Lucr. and in Cicero's Aratea which Lucr. often imitates. 692 *concludit* Lach. for *contudit*. *contundit* Mon. Brix. vulg. 700 *diei* Nicc. for *dici*. 704 it seems to me manifest that the poet

Luna potest solis radiis percussa nitere
inque dies magis *id* lumen convertere nobis
ad speciem, quantum solis secedit ab orbi,
donique eum contra pleno bene lumine fulsit
atque oriens obitus eius super edita vidit;
inde minutatim retro quasi condere lumen
debet item, quanto propius iam solis ad ignem
labitur ex alia signorum parte per orbem;
ut faciunt, lunam qui fingunt esse pilai
consimilem cursusque viam sub sole tenere.
est etiam quare proprio cum lumine possit
volvier et varias splendoris reddere formas.
corpus enim licet esse aliud quod fertur et una
labitur omnimodis occursans officiensque
nec potis est cerni, quia cassum lumine fertur.
versarique potest, globus ut, si forte, pilai
dimidia ex parti candenti lumine tinctus,
versandoque globum variantis edere formas,
donique eam partem, quaecumque est ignibus aucta,
ad speciem vertit nobis oculosque patentis;
inde minutatim retro contorquet et aufert
luciferam partem glomeraminis atque pilai;
ut Babylonica Chaldaeum doctrina refutans
astrologorum artem contra convincere tendit,
proinde quasi id fieri nequeat quod pugnat uterque
aut minus hoc illo sit cur amplectier ausis.
denique cur nequeat semper nova luna creari
ordine formarum certo certisque figuris
inque dies privos aborisci quaeque creata

refers to 660—665, and that a verse is lost such as this, *Qui faciunt solis nova semper lumina gigni*: probably its resemblance to 703 caused its omission. Lach. strangely supposes the sentence complete and joins 704 with 703, as if anybody could ever deny that the sun rose in a certain quarter: 704 which by itself has no meaning was placed after 714 by Nauger. followed by all before Lach. 705 *percussa* Flor. 31 Camb. before Lamb. for *perculsa*. 706 *magis id lumen* Lach. for *magis lumen*. *magis hoc* Flor. 31. *maius* Mar. Ald. 1 Junt. vulg. *magis: et lumen* Pont. Nauger. 708 723 *Donique*. *Donicum* Lamb. wrongly in both places. 711 *iam* Mar. Ald. 1 Junt. for *tam*. 720 *ut, si forte*. *ut sit forte* Lach. after J. Dousa fil. 'sine ulla causa et cum orationis sententiaeque detrimento' says Madvig emend. Liv. p. 123. 727 *Babylonica* Flor. 31 Pont. Mar. for *Babylonisa*. *Chaldaeum* Avanc. *Chaldeum* AB. *Chaldeam* A corr. Nicc. Flor.

atque alia illius reparari in parte locoque,
difficilest ratione docere et vincere verbis,
ordine cum *possint* tam certo multa creari.
it ver et Venus, et Veneris praenuntius ante
pennatus graditur, zephyri vestigia propter
Flora quibus mater praespargens ante viai
cuncta coloribus egregiis et odoribus opplet.
inde loci sequitur calor aridus et comes una
pulverulenta Ceres *et* etesia flabra aquilonum.
inde autumnus adit, graditur simul Euhius Euan.
inde aliae tempestates ventique secuntur,
altitonans Volturnus et auster fulmine pollens.
tandem bruma nives adfert pigrumque rigorem
reddit: hiemps sequitur crepitans hanc dentibus algu.
quo minus est mirum si certo tempore luna
gignitur et certo deletur tempore rusus,
cum fieri possint tam certo tempore multa.
  Solis item quoque defectus lunaeque latebras
pluribus e causis fieri tibi posse putandumst.
nam cur luna queat terram secludere solis
lumine et a terris altum caput obstruere ei,
obiciens caecum radiis ardentibus orbem;
tempore eodem aliud facere id non posse putetur
corpus quod cassum labatur lumine semper?
solque suos etiam dimittere languidus ignis
tempore cur certo nequeat recreareque lumen,
cum loca praeteriit flammis infesta per auras,
quae faciunt ignis interstingui atque perire?

31 Camb. etc. 733 *aborisci*. *abolisci* AB. *abolesci* Mar. Junt. *aboriri* Brix. Pont. Avanc. *abolescere* Lamb. 736 *possint* added by Lach.: see 750: *videas* by Flor. 31 Camb. Mar. vulg. 737 *Veneris*. *veris* Pont. Bentl. Wak. Lach. 738 *zephyri*. *zephyrus* Pont. Mar. Ald. 1 Junt. vulgo Lach.: but see notes 2. 742 *Pulverulenta Ceres* Pont. Mar. Ald. 1 Junt. for *Pulveruntа Ceres*. *et* added by Mar. Ald. 1 Junt. 747 *Reddit* Flor. 31 Camb. for *Redit*. *Prodit hiemps*, Lach. *crepitans* Flor. 31 Vat. Mon. Brix. for *creditans*. *hanc* B rightly. *ac* A. *accentibus algi* Nicc. Flor. 31 Camb. Mon. Vat. Junt. *algu* Bergk for *algi*. *algus* Lamb. *algor* Lach. 750 *fieri* Mar. Ald. 1 Junt. for *fleri*. *florere queant* one Vat.

753 *solis* Lamb. first for *possis*. *posces* Mar. Ald. 1 Junt. 761 *perire* Mar. Ald. 1 Junt. for *periri*. Fleckeisen krit. miscellen p. 55 defends *periri* on the analogy of *fieri*, for which Ennius ann. 15 has *fiere*, and of *vēniri* sometimes used for *vēnire*: but the scribe was unconsciously misled by the other infinitive.

et cur terra queat lunam spoliare vicissim
lumine et oppressum solem super ipsa tenere,
menstrua dum rigidas coni perlabitur umbras;
tempore eodem aliut nequeat succurrere lunae
corpus vel supra solis perlabier orbem,
quod radios interrumpat lumenque profusum?
et tamen ipsa suo si fulget luna nitore,
cur nequeat certa mundi languescere parte,
dum loca luminibus propriis inimica per exit?
  Quod superest, quoniam magni per caerula mundi
qua fieri quicquid posset ratione resolvi,
solis uti varios cursus lunaeque meatus
noscere possemus quae vis et causa cieret,
quove modo *possent* offecto lumine obire
et neque opinantis tenebris obducere terras,
cum quasi conivent et aperto lumine rursum
omnia convisunt clara loca candida luce,
nunc redeo ad mundi novitatem et mollia terrae
arva, novo fetu quid primum in luminis oras
tollere et incertis crerint committere ventis.
  Principio genus herbarum viridemque nitorem
terra dedit circum collis camposque per omnis,
florida fulserunt viridanti prata colore,
arboribusque datumst variis exinde per auras
crescendi magnum inmissis certamen habenis.
ut pluma atque pili primum saetaeque creantur
quadripedum membris et corpore pennipotentum,
sic nova tum tellus herbas virgultaque primum
sustulit, inde loci mortalia saecla creavit
multa modis multis varia ratione coorta.
nam neque de caelo cecidisse animalia possunt
nec terrestria de salsis exisse lacunis.
linquitur ut merito maternum nomen adepta
terra sit, e terra quoniam sunt cuncta creata.
multaque nunc etiam existunt animalia terris

768 *fulget*. *fulgit* Lamb. Lach. 771 = 764. 776 *possent* added by Brix. *soleant* (not *valeant*) Flor. 31 Camb. Mar. Ald. 1 Junt. Nauger. Lamb. Gif. Creech Wak. 782 *Tollere et* Pont. Mar. Ald. 1 Junt. for *Tolleret*. *crerint committere* Orelli ecl. poet. Lat., Madvig in Henrichsen de frag. Gott. p. 36, Lach. all

imbribus et calido solis concreta vapore:
quo minus est mirum si tum sunt plura coorta
et maiora, nova tellure atque aethere adulta.
principio genus alituum variaeque volucres
ova relinquebant exclusae tempore verno,
folliculos ut nunc teretis aestate cicadae
lincunt sponte sua victum vitamque petentes.
tum tibi terra dedit primum mortalia saecla.
multus enim calor atque umor superabat in arvis.
hoc ubi quaeque loci regio opportuna dabatur,
crescebant uteri terram radicibus apti;
quos ubi tempore maturo patefecerat aestus
infantum fugiens umorem aurasque petessens,
convertebat ibi natura foramina terrae
et sucum venis cogebat fundere apertis
consimilem lactis, sicut nunc femina quaeque
cum peperit, dulci repletur lacte, quod omnis
impetus in mammas convertitur ille alimenti.
terra cibum pueris, vestem vapor, herba cubile
praebebat multa et molli lanugine abundans.
at novitas mundi nec frigora dura ciebat
nec nimios aestus nec magnis viribus auras.
omnia enim pariter crescunt et robora sumunt.
  Quare etiam atque etiam maternum nomen adepta
terra tenet merito, quoniam genus ipsa creavit
humanum atque animal prope certo tempore fudit
omne quod in magnis bacchatur montibu' passim,
aeriasque simul volucres variantibu' formis.
sed quia finem aliquam pariendi debet habere,
destitit, ut mulier spatio defessa vetusto.
mutat enim mundi naturam totius aetas
ex alioque alius status excipere omnia debet,

three independently for *credunt committere*. *tentaret credere* Lamb. 800 *maiora* Pont. Mar. Avanc. in notes at end of Catullus, Junt. for *maiore*. 805 *primum*. *passim* Lach. without any necessity. 808 *terram* AB Nicc. rightly. *terrae* vulg. before Lach. 809 *aestus* Lach. for *aestas*. *aetas* Mar. Ald. 1 Junt. vulg. 812 *Et* Flor. 31 Camb. for *Ut*. 823 *animal* Mar. Ald. 1 Junt. for *anima*. *animas* A corr. Nicc. all later mss. *animans* Wak.: but *animans* is feminine in Lucr. 824 *magnis* Flor. 31 Camb. Mon. Pont. for *magni*. 825

nec manet ulla sui similis res: omnia migrant,
omnia commutat natura et vertere cogit.
namque aliut putrescit et aevo debile languet,
porro aliut clarescit et *e* contemptibus exit.
sic igitur mundi naturam totius aetas
mutat et ex alio terram status excipit alter:
quod potuit nequit, ut possit quod non tulit ante.
  Multaque tum tellus etiam portenta creare
conatast mira facie membrisque coorta,
androgynum, interutrasque nec utrum, utrimque remotum,
orba pedum partim, manuum viduata vicissim,
muta sine ore etiam, sine voltu caeca reperta,
vinctaque membrorum per totum corpus adhaesu,
nec facere ut possent quicquam nec cedere quoquam
nec vitare malum nec sumere quod foret usus.
cetera de genere hoc monstra ac portenta creabat,
nequiquam, quoniam natura absterruit auctum
nec potuere cupitum aetatis tangere florem
nec reperire cibum nec iungi per Veneris res.
multa videmus enim rebus concurrere debere,
ut propagando possint procudere saecla;
pabula primum ut sint, genitalia deinde per artus
semina qua possint membris manare remissis;
feminaque ut maribus coniungi possit, habere
mutua qui mutent inter se gaudia uterque.
  Multaque tum interiisse animantum saecla necessest
nec potuisse propagando procudere prolem.
nam quaecumque vides vesci vitalibus auris,
aut dolus aut virtus aut denique mobilitas est

Aeriasque Mar. Ald. 1 Junt. for *Aeriaeque*. 833 *clarescit* Lach. for *crescit*: he also suggests *succrescit*, which may be right: or *tum crescit*. *concrescit* Ald. 1 Junt. not Pont. or Mar. *e* added by Mar. Ald. 1 Junt. 836 *Quod potuit nequit, ut* Ed. for *Quod potuit nequeat*. *pote uti nequeat* Lach. *tulit ut* Bentl. 838 *facie* Flor. 31 Brix. for *facit*. 839 *interutrasque*. *interutraque* Lach. *Androgynum, interutraque nec utrum, utrimque remotum* Lach. most acutely for *Androgynem inter utras nec utramque utrumque remotum*. *Androgynem interutra neutrumque utrinque remotam* Mar.: *utrinque* is in Brix. 841 *Muta* Nauger. for *Multa*.
  844 *foret usus* Lamb. for *volet usus*, as IV 831. 852 *remissis*. *remissa* Lach. 853 *coniungi possit, habere*. *coniungi possit avere* Lach.: a most awkward phrase: the wish of the female is not important. 854 *Mutua qui*

ex ineunte aevo genus id tutat*a* reservans.
multaque sunt, nobis ex utilitate sua quae
commendata manent, tutelae tradita nostrae.
principio genus acre leonum saevaque saecla
tutatast virtus, volpes dolus et fuga cervos.
at levisomna canum fido cum pectore corda
et genus omne quod est veterino semine partum
lanigeraeque simul pecudes et bucera saecla
omnia sunt hominum tutelae tradita, Memmi.
nam cupide fugere feras pacemque secuta
sunt et larga suo sine pabula parta labore,
quae damus utilitatis eorum praemia causa.
at quis nil horum tribuit natura, nec ipsa
sponte sua possent ut vivere nec dare nobis
utilitatem aliquam quare pateremur eorum
praesidio nostro pasci genus esseque tutum,
scilicet haec aliis praedae lucroque iacebant
indupedita suis fatalibus omnia vinclis,
donec ad interitum genus id natura redegit.
  Sed neque Centauri fuerunt, nec tempore in ullo
esse queunt duplici natura et corpore bino
ex alienigenis membris compacta, potestas
hinc illinc vis*que* ut non sat par esse potissit.
id licet hinc quamvis hebeti cognoscere corde.
principio circum tribus actis impiger annis
floret ecus, puer hautquaquam; nam saepe etiam nunc
ubera mammarum in somnis lactantia quaeret.

mutent Bern. for *Mutua qui metuent.* *Mutua quis nectent* Mar. Ald. 1 Junt. *nectant* Nauger. Lamb. *Mutuaque insinuent* Lach. 859 *tutata* Brix. Pont. Mar. Ald. 1 Junt. for *tuta.* 863 *et fuga* B Avanc. *ut fuga* A Nicc. Mon. Junt. 865 *veterino* Nonius Pont. Mar. Avanc. Junt. *veteri non* mss. 868 *secuta* Lamb. in errata to ed. 3 first for *secutae.* 871 *nil* Pont. Mar. Ald. 1 Junt. for *ni* A, *in* B. 880 *potestas Hinc illinc visq. ut non sat par esse potissit* Ed. for *potestas Hinc illinc par vis ut non sat* (B, *sit* A) *pars esse potissit*: *par* I assume was written in the margin to take the place of the unmeaning *pars*, and thus got into the text: so above 117 *pars esse* mss. for *par esse*; and II 1017 *par* for *pars.* *p. H. i. partis ut si par e. p.* Lach. which I hardly understand. Lamb. reads *queat* for *queunt* after Mar. Ald. 1 and Junt. joining *potestas* with what precedes, and ed. 3 has *Hinc illinc par vis ut non sic esse potissit.* *p. H. i. parilis quis non superesse potissit* Bern. 884 *hautquaquam* Nicc. for *hautquamquam.* *nam* om. A Nicc. and later mss.: hence *quia* Avanc. *quin* Mar. Junt. Lamb. etc. *haut ita quamquam*

post ubi ecum validae vires aetate senecta
membraque deficiunt fugienti languida vita,
tum demum puero illi aevo florente iuventas
occipit et molli vestit lanugine malas.
ne forte ex homine et veterino semine equorum
confieri credas Centauros posse neque esse,
aut rabidis canibus succinctas semimarinis
corporibus Scyllas et cetera de genere horum,
inter se quorum discordia membra videmus;
quae neque florescunt pariter nec robora sumunt
corporibus neque proiciunt aetate senecta
nec simili Venere ardescunt nec moribus unis
conveniunt, neque sunt eadem iucunda per artus.
quippe videre licet pinguescere saepe cicuta
barbigeras pecudes, homini quae est acre venenum.
flamma quidem *vero* cum corpora fulva leonum
tam soleat torrere atque urere quam genus omne
visceris in terris quodcumque et sanguinis extet,
qui fieri potuit, triplici cum corpore ut una,
prima leo, postrema draco, media ipsa, Chimaera
ore foras acrem flaret de corpore flammam?
quare etiam tellure nova caeloque recenti
talia qui fingit potuisse animalia gigni,
nixus in hoc uno novitatis nomine inani,
multa licet simili ratione effutiat ore,
aurea tum dicat per terras flumina vulgo
fluxisse et gemmis florere arbusta suësse
aut hominem tanto membrorum esse impete natum,
trans maria alta pedum nisus ut ponere posset
et manibus totum circum se vertere caelum.
nam quod multa fuere in terris semina rerum

Flor. 31 Camb. 885 *lactantia* Flor. 31 Mon. Ver. Ven. for *laetantia.* *quaeret.* *quaerit* Mon. Pont. Ald. 1 Junt. Lamb. 888 *puero illi* Ed. for *puerili.* *pueris* Avanc. Lamb. Lach.; perhaps Lucr. wrote *puero li.* 889 *Occipit* Mar. Ald. 1 Junt. for *Officit.* 892 *rabidis* Heins. in ms. notes, and Bentl. for *rapidis*: see IV 712. 896 *proiciunt* Lamb. in notes to ed. 2 and in ed. 3, after Turnebus, for *proficiunt.* 901 *vero* added by Ald. 1 Junt. (not Pont. or Mar.) vulg. *Denique f. q.* Lach. *Ardua, Ignea* others. 904 *ut una* Brix. Pont. Avanc. for *ut unam.* *iuncta* Mar. Junt. 906 *foras* Nauger. for *feras.* *ferox* Pont. Junt. *ferens* Mar. 914 *ponere* B corr. Mar. Junt. for *pondere.* *pandere* Avanc. 923

tempore quo primum tellus animalia fudit,
nil tamen est signi mixtas potuisse creari
inter se pecudes compactaque membra animantum,
propterea quia quae de terris nunc quoque abundant
herbarum genera ac fruges arbustaque laeta
non tamen inter se possunt complexa creari,
sed res quaeque suo ritu procedit et omnes
foedere naturae certo discrimina servant.
At genus humanum multo fuit illud in arvis
durius, ut decuit, tellus quod dura creasset,
et maioribus et solidis magis ossibus intus
fundatum, validis aptum per viscera nervis,
nec facile ex aestu nec frigore quod caperetur
nec novitate cibi nec labi corporis ulla.
multaque per caelum solis volventia lustra
volgivago vitam tractabant more ferarum.
nec robustus erat curvi moderator aratri
quisquam, nec scibat ferro molirier arva
nec nova defodere in terram virgulta neque altis
arboribus veteres decidere falcibu' ramos.
quod sol atque imbres dederant, quod terra crearat
sponte sua, satis id placabat pectora donum.
glandiferas inter curabant corpora quercus
plerumque; et quae nunc hiberno tempore cernis
arbita puniceo fieri matura colore,
plurima tum tellus etiam maiora ferebat.
multaque praeterea novitas tum florida mundi
pabula dura tulit, miseris mortalibus ampla.
at sedare sitim fluvii fontesque vocabant,
ut nunc montibus e magnis decursus aquai
claru' citat late sitientia saecla ferarum.
denique nota vagi silvestria templa tenebant

Sed res quaeque Ed. for *Sed si quaeque*. *Sed sic quodque* Mar. (*sic* Pont.). *Res sic* Lamb. *Sed vis* Lach. 925 *At* Lach. for *Et*; and the change seems necessary. 934 *molirier* Brix. Junt. for *mollerier*. *mollirier* Pont. Mar. as A corr. 941 *dura* Vat. 3276 Nauger. for *dira*: a certain correction. *dia* Avanc. 947 *Claru' citat late* Forbiger for *Claricitati a te*. *Clarior accitat* Flor. 31 2 Vat. Mar. Ald. 1 Junt. Lamb. ed. 1 and 2. *Claricitat late* Lamb. ed. 3 after Sim. Bosius. *Clarior invitat* Politian in marg. Flor. 29. *Clarigitat late* Lach. who sneers at Forbiger: but see notes 2. 948 *nota vagi silvestria* Lach.

nympharum, quibus e scibant umori' fluenta
lubrica proluvie larga lavere umida saxa,
umida saxa, super viridi stillantia musco,
et partim plano scatere atque erumpere campo.
necdum res igni scibant tractare neque uti
pellibus et spoliis corpus vestire ferarum,
sed nemora atque cavos montis silvasque colebant
et frutices inter condebant squalida membra
verbera ventorum vitare imbrisque coacti.
nec commune bonum poterant spectare neque ullis
moribus inter se scibant nec legibus uti.
quod cuique obtulerat praedae fortuna, ferebat
sponte sua sibi quisque valere et vivere doctus.
et Venus in silvis iungebat corpora amantum;
conciliabat enim vel mutua quamque cupido
vel violenta viri vis atque inpensa libido
vel pretium, glandes atque arbita vel pira lecta.
et manuum mira freti virtute pedumque
consectabantur silvestria saecla ferarum
975 missilibus saxis et magno pondere clavae;
968 multaque vincebant, vitabant pauca latebris;
saetigerisque pares subu' *sic* silvestria membra
nuda *da*bant terrae nocturno tempore capti,
circum se foliis ac frondibus involventes.
nec plangore diem magno solemque per agros
quaerebant pavidi palantes noctis in umbris,

for *n. vagis s.* *noctivagi* Nauger. (not Junt.) vulg. *nocte vagi* Bentl. 949 *quibus escibant* AB Vat. 1706 Reg. ('Nic. Heinsii'). *quibus e scibant* Lach. first after them. *aestibant* Nicc. *excibant* Camb. Pont. *exibant* Flor. 31. *umori'* Bentl. Lach. for *umore*. 962 *iungebat* Nicc. for *lugebat*. *lugebat* (*iungebat*) Ver. Ven. 968 (975) first brought to this place by Nauger. not Avanc. who like Mar. and Junt. places it after 961. 970 *subu' sic silvestria* Ed. for *subus silvestria*: *sic* could easily fall out in this position. *suibus* Camb. Ver. Ven. vulg.; but Lucr. uses *sŭbus* in VI 974 977: Luc. Mueller de re metr. p. 350 defends *sūbus*, from Varro Eumen. 22 *An colubrae an volvae de Albuci subus Athenis*. Lach. deals with this passage in a most arbitrary way: he splits 970 (969) into two verses, supposes the end of one and the beginning of the other to be lost and inserts 968 (975) between them: thus *S. p. s.* [*ardorique leonum*] *M. s. e. m. p. c.* [*Inde cavis temere abiecti*] *s. m.*: a more unconvincing note than his I never read, or more sophistical objections to the present text. 971 *Nuda dabant* Lamb. ed. 3 first for *Nudabant* which Wak. indignantly restores, making these simple sons of earth unclothe their naked limbs and rival the

974 sed taciti respectabant somnoque sepulti,
976 dum rosea face sol inferret lumina caelo.
a parvis quod enim consuerant cernere semper
alterno tenebras et lucem tempore gigni,
non erat ut fieri posset mirarier umquam
nec diffidere ne terras aeterna teneret
nox in perpetuum detracto lumine solis.
sed magis illud erat curae, quod saecla ferarum
infestam miseris faciebant saepe quietem.
eiectique domo fugiebant saxea tecta
spumigeri suis adventu validique leonis
atque intempesta cedebant nocte paventes
hospitibus saevis instrata cubilia fronde.

Nec nimio tum plus quam nunc mortalia saecla
dulcia linquebant labentis lumina vitae.
unus enim tum quisque magis deprensus eorum
pabula viva feris praebebat, dentibus haustus,
et nemora ac montis gemitu silvasque replebat
viva videns vivo sepeliri viscera busto.
at quos effugium servarat corpore adeso,
posterius tremulas super ulcera taetra tenentes
palmas horriferis accibant vocibus Orcum,
donique eos vita privarant vermina saeva
expertis opis, ignaros quid volnera vellent.
at non multa virum sub signis milia ducta
una dies dabat exitio nec turbida ponti
aequora fligebant navis ad saxa virosque.
hic temere incassum frustra mare saepe coortum
saevibat leviterque minas ponebat inanis,

famed exploit of Prince Vortigern's grandsire. 976 *rosea* Flor. 31 Brix. Pont. Mar. for *rotea*. 984 *Eiectique* Flor. 31 Camb. etc. for *Electique* B, *Et lectique* A Nicc. 985 *validique*. *validive* Lach.; but comp. 987 *Hospitibus saevis* in plur. 989 *labentis* Muretus Lamb. Lach. for *lamentis*. 993 *vivo* Flor. 31 Camb. Mon. etc. for *vino*. 995 *ulcera* Flor. 31 Camb. Mar. for *vicerat*. *viscera* A corr. Nicc. Ver. Ven. 997 *Donique* Is. Voss. in ms. notes, Lach. for *Denique*. *Doniquom* Heins. in ms. notes. *Donec* Mar. Junt. *Donicum* Lamb. 1001 *fligebant* Lach. for *lidebant*. *ledebant* A corr. Camb. Mon. Ver. Ven. *laedebant* vulg. *lidebant* may be from Lucr.: see notes 2. 1002 *Hic* Lach. for *Nec*. *Sed* Lamb. The rest of this verse is quite causelessly altered by Mar. Junt. Lamb.

1003 *ponebat* Mar. Ald. 1 Junt. for *potebas*. *poscebat* Flor. 31 Camb. 1006

nec poterat quemquam placidi pellacia ponti
subdola pellicere in fraudem ridentibus undis,
improba naucleri ratio cum caeca iacebat.
tum penuria deinde cibi languentia leto
membra dabat, contra nunc rerum copia mersat.
illi *in*prudentes ipsi sibi saepe venenum
vergebant, nu*rui nunc* dant sollertius ipsi.

Inde casas postquam ac pellis ignemque pararunt,
et mulier coniuncta viro concessit in unum

. . . .

cognita sunt, prolemque ex se videre creatam,
tum genus humanum primum mollescere coepit.
ignis enim curavit ut alsia corpora frigus
non ita iam possent caeli sub tegmine ferre,
et Venus imminuit viris puerique parentum
blanditiis facile ingenium fregere superbum.
tunc et amicitiem coeperunt iungere aventes
finitimi inter se nec laedere nec violari,
et pueros commendarunt muliebreque saeclum,
vocibus et gestu cum balbe significarent
imbecillorum esse aecum misererier omnis.
nec tamen omnimodis poterat concordia gigni,

naucleri ratio cum Ed. for *navigii ratio tum*. The v. is ejected by Lach. as spurious: the *ri* of *naucleri* was absorbed in *ratio*; and then the corruption was easy.

1008 *dabat* Flor. 31 Camb. for *daeant* B, *deant* A. *dedant* Nicc. Ver. Ven. 1009 *Illi imprudentes* Mar. Ald. 1 Junt. for *Illi prudentes*. 1010 *nurui nunc dant sollertius ipsi* Ed. for *nudant sollertius ipsi*, the scribe having omitted the similar letters: *ipsi* is dat.; see notes 2. *nuptis nunc dant sollertiu' sponsi* Ed. in small ed. *nunc se nudant s. ipsi* Lach. which can hardly be right. *nunc dant letum sol. ipso* Mar. *nunc dant aliis sol. ipsi* Junt. vulg. and Ed. in ed. 1; but *ipsi* is then solecistic.

1011 *casas* Flor. 31 Camb. Mon. Brix. Pont. for *cassas*. *pellis* (*pelles*) Mon. Brix. Ver. Ven. for *pellus*. *pelvis* Flor. 31 Camb. 1012 a verse is lost here of this nature *Hospitium, ac lecti socialia iura duobus*: see notes 2. Mar. Ald. 1 Junt. vulg. give *Castaque privatae Veneris connubia laeta*. 1013 *Cognita sunt*. *Conubium* Lach. *Coniugium* Bern. 1016 *ferre* Flor. 31 Camb. Pont. Mar. for *ferri*.

1019 *amicitiem* A Nicc. Flor. 31 Camb. Gif. *amicitiam* B Mon. Avanc. at end of Catullus, Junt. Lamb. *aventes Finitimi inter se*. *habentes* A corr. Nicc. Flor. 31 Camb. etc. *Finitim* A Nicc. Ver. Ven.: hence though Mar. Junt. rightly read *aventes*, yet Nauger. Lamb. Creech Wak. vulg. before Lach. keep the absurd *habentes*. *Finitima* Brix. Pont. Ald. 1 Nauger. Lamb. vulg. but *Finitimi* B Camb. Mar. rightly. *violari* Lach. for *violare*. 1023 *omnis* (*omneis*) Mar. Junt. for *omni*: a certain correction, yet strange to say Nauger. Lamb. etc. have adopted the

sed bona magnaque pars servabat foedera caste;
aut genus humanum iam tum foret omne peremptum
nec potuisset adhuc perducere saecla propago.
At varios linguae sonitus natura subegit
mittere et utilitas expressit nomina rerum,
non alia longe ratione atque ipsa videtur
protrahere ad gestum pueros infantia linguae,
cum facit ut digito quae sint praesentia monstrent.
sentit enim vim quisque suam quoad possit abuti.
cornua nata prius vitulo quam frontibus extent,
illis iratus petit atque infestus inurget.
at catuli pantherarum scymnique leonum
unguibus ac pedibus iam tum morsuque repugnant,
vix etiam cum sunt dentes unguesque creati.
alituum porro genus alis omne videmus
fidere et a pinnis tremulum petere auxiliatum.
proinde putare aliquem tum nomina distribuisse
rebus et inde homines didicisse vocabula prima,
desiperest. nam cur hic posset cuncta notare
vocibus et varios sonitus emittere linguae,
tempore eodem alii facere id non quisse putentur?
praeterea si non alii quoque vocibus usi
inter se fuerant, unde insita notities est
utilitatis et unde data est huic prima potestas,
quid vellet facere ut sciret animoque videret?

omnium of one Vat. and Ald. 1. 1025 *caste* Flor. 31 for *casti*. *servabant casti* Mar. Junt. Lamb. vulg. contrary to usage of Lucr. 1032 *monstrent* Mar. or Mon. and Junt. for *monstret*. Flor. 30 has the mark of *n* over the *e*, but whether from the hand of Nicc. I could not tell. 1033 *vim* Brix. (?) Ver. Ven. Avanc. for *vis*. *vi...sua* Flor. 31 Mar. Junt. *vis...suas* Luc. Mueller de re metr. p. 382, perhaps rightly: comp. II 586 III 265. *quod* i.e. *quoad* AB. *quam* Avanc. Lamb. in all 3 eds. Creech etc.: Lamb. says in his notes that he had once thought of *quoad*, but much preferred *quam*. 1035 *infestus* Flor. 31 Mar. Junt. Nauger. Wak. Lach. for *infessus*. *infensus* Mon. Pont. Avanc. Lamb.: but *infestus* is a Lucretian word, *infensus* not. 1038 *Vix etiam cum* Mar. Junt. for *Vix tiam cum* B, *Vix iam cum* A Nicc. etc. *Vix quoque iam cum* Flor. 31. *Vix iam etiam cum* Avanc. *Vix iam cum ipsis* Pont. Nauger. Lamb. ed. 1 and 2; *Vix dum etiam cum* ed. 3.

1039 *porro* Ald. 1 Junt. for *proporro*. 1040 *pinnis* B, *pennis* A Nonius Nicc. (VI 834 *pinnarum* A, *pennarum* B). 1048 *Utilitatis et* Mar. Avanc. Junt. for *Utilitas et*. Ald. 1 has the misprint *Utilitatis etiam*, but Avanc. corrects it at end of his Catullus. Lach. takes no notice of this and similar corrections, though his

cogere item pluris unus victosque domare
non poterat, rerum ut perdiscere nomina vellent.
nec ratione docere ulla suadereque surdis,
quid sit opus facto, facilest; neque enim paterentur
nec ratione ulla sibi ferrent amplius auris
vocis inauditos sonitus obtundere frustra.
postremo quid in hac mirabile tantoperest re,
si genus humanum, cui vox et lingua vigeret,
pro vario sensu varia res voce notaret?
cum pecudes mutae, cum denique saecla ferarum
dissimilis soleant voces variasque ciere,
cum metus aut dolor est et cum iam gaudia gliscunt.
quippe etenim licet id rebus cognoscere apertis.
inritata canum cum primum magna Molossum
mollia ricta fremunt duros nudantia dentes,
longe alio sonitu rabie restricta minantur,
et cum iam latrant et vocibus omnia complent.
et catulos blande cum lingua lambere temptant
aut ubi eos iactant pedibus morsuque petentes
suspensis teneros imitantur dentibus haustus,
longe alio pacto gannitu vocis adulant,
et cum deserti baubantur in aedibus aut cum

own Catullus shews that he knew the edition of Avanc. 1049 Avanc. followed by Lamb. Lach. etc. but not by Junt. or Nauger. has corrupted the sense by reading *Quid vellet, facere ut scirent animoque viderent*: on comparing what precedes and follows, it is manifest that the construction must be the same as 183 *Quid vellent facere ut scirent*: *first* he, like the gods there, had to know what he wanted himself; then *item* 1050 to make others to know. *scirēt* is like *fulgēt* in II 27. 1053 *Quid sit opus facto facilest* Lach. for *facile si*. *faciles neque enim* Flor. 31 Camb. Mar. Ald. 1 Junt. Lamb. ed. 1 and 2; but ed. 3 *Quid facto esset opus; neque enim faciles*: a violent change; but his knowledge of Latin taught him that in the old reading *sit* and the position of *neque enim* were quite indefensible. 1058 *varia res* Bentl. for *varias res*: the attraction of *res* has caused the error: 1090 *alia re* mss. for *alia res*. 1062 *licet id rebus* Lach. after Gif. in note for *licet in rebus*. *id licet e rebus* Lamb. 1063 *magna*. *inmane* Lach. without cause. 1064 *fremunt* Mar. Ald. 1 Junt. for *premunt*. *tremunt* Nonius. 1065 *alio* Flor. 31 Camb. Mar. etc. for *alia*. *rabie restricta* Lach. for *rabie stricta*. *rabies districta* Flor. 31 Camb. 2 Vat. Mar. *rabie districta* Pont. Lamb. *rabie distracta* 2 Vat. Nauger. *minantur* Pont. Nauger. for *minatur*. 1067 *Et* Lach. for *At* which even Lamb. retains. 1068 *iactant* Nauger. for *lactant*. *petentes* Flor. 31 Mon. Ver. Ven. etc. for *potentes*. *patente* Is. Voss. in ms. notes. 1069 *teneros imitantur*. *veros imitantur* Faber in notes. *teneros minitantur* Lach.: but they fine

plorantis fugiunt summisso corpore plagas.
denique non hinnitus item differre videtur,
inter equas ubi equus florenti aetate iuvencus
pinnigeri saevit calcaribus ictus amoris,
et fremitum patulis ubi naribus edit ad arma,
et cum sic alias concussis artubus hinnit?
postremo genus alituum variaeque volucres,
accipitres atque ossifragae mergique marinis
fluctibus in salso victum vitamque petentes,
longe alias alio iaciunt in tempore voces,
et quom de victu certant praedaeque repugnant.
et partim mutant cum tempestatibus una
raucisonos cantus, cornicum ut saecla vetusta
corvorumque greges ubi aquam dicuntur et imbris
poscere et interdum ventos aurasque vocare.
ergo si varii sensus animalia cogunt,
muta tamen cum sint, varias emittere voces,
quanto mortalis magis aecumst tum potuisse
dissimilis alia atque alia res voce notare!
[Illud in his rebus tacitus ne forte requiras,
fulmen detulit in terram mortalibus ignem
primitus, inde omnis flammarum diditur ardor.
multa videmus enim caelestibus inlita flammis
fulgere, cum caeli donavit plaga vapore.
et ramosa tamen cum ventis pulsa vacillans
aestuat in ramos incumbens arboris arbor,
exprimitur validis extritus viribus ignis

too much I think, nor do I see any real difference in sense between *imitantur* and *minitantur*. 1071 *deserti baubantur* Nonius Nicc. for *desertibus aubantur*, i.e. *deserti b. aubantur*, AB: so VI 1241 *Poenibus at*: Aen. XI 572 *Nutribus at* P. 1076 *patulis ubi naribus* Lach. for *patulis sub naribus*: this slight change I adopt, but with hesitation for other reasons and also on account of the apparent imitation of Virgil georg. III 85 *Collectumque fremens volvit sub naribus ignem*: 'turpe et obscenum loquendi genus' really comes to nothing: Aen. XI 736 *At non in Venerem segnes nocturnaque bella*; georg. III 98 *siquando ad proelia ventum est*, and the like are quite as coarse. 1080 *salso. salsis* Lamb. tacitly. 1082 *praedaeque* Avanc. rightly for *praedataque. praedaque* A corr. Nicc. vulg. 1084 *ut* Nauger. for *et*. Ald. 1 Junt. omit the word; and also Mar., but he changes *ubi* of next v. to *uti*. 1088 *Muta* Flor. 31 Mar. Ald. 1 Junt. for *Multa*. 1090 *res* Nicc. for *re*: comp. n. to 1058. 1094 *inlita* Lach. for *insita. incita* Mar. Junt. vulg. 1095 *vapore* Lach. for *vaporis. vapores* vulg. *rare* Nonius. 1096 *Et* Mar.

et micat interdum flammai fervidus ardor,
mutua dum inter se rami stirpesque teruntur.
quorum utrumque dedisse potest mortalibus ignem.
inde cibum coquere ac flammae mollire vapore
sol docuit, quoniam mitescere multa videbant
verberibus radiorum atque aestu victa per agros.
Inque dies magis hi victum vitamque priorem
commutare novis monstrabant rebu' benigni,
ingenio qui praestabant et corde vigebant.
condere coeperunt urbis arcemque locare
praesidium reges ipsi sibi perfugiumque,
et pecus atque agros divisere atque dedere
pro facie cuiusque et viribus ingenioque;
nam facies multum valuit viresque vigentes.
posterius res inventast aurumque repertum,
quod facile et validis et pulchris dempsit honorem;
divitioris enim sectam plerumque secuntur
quamlubet et fortes et pulchro corpore creti.
quod siquis vera vitam ratione gubernet,
divitiae grandes homini sunt vivere parce
aequo animo; neque enim est umquam penuria parvi.
at claros homines voluerunt se atque potentes,
ut fundamento stabili fortuna maneret
et placidam possent opulenti degere vitam,
nequiquam, quoniam ad summum succedere honorem
certantes iter infestum fecere viai,
et tamen e summo, quasi fulmen, deicit ictos
invidia interdum contemptim in Tartara taetra;

Junt. for *Ut*. 1099 *Et micat* Mar. Ald. 1 Junt. for *Emicat* which Lamb. in errata to ed. 3 wrongly restores. 1102 *coquere. quoq*; *uere* A, *coq. uere* B, *quoquere* Nicc. and Lach. 1105 *hi victum* Nauger. for *invictum. et victum* Mar. Ald. 1 Junt. 1106 *rebu' benigni* Lach. for *rebus et igni*. 1110 *Et pecus atque agros* Lach. for *Et pecudes atque agros*: comp. 1291 where for *pecus* B has *pecudes. Et pecudes et agros* Flor. 31 Camb. Pont. Mar. vulg. *divisere atque dedere* Pont. Mar. Ald. 1 Junt. for *diviseratque debere. divisim ut quisquis haberet* Camb. 1112 *viresque vigentes* Faber in notes for *viresque vigebant. viresque vigorque* Lach.: *vigebant* he says has come from 1107: clearly *vires vigebant* could only mean 'their strength was then in its vigour': a meaning here quite out of place. 1116 *creti* Flor. 31 Camb. Brix. Ver. Ven. Mar. for *certi*. 1120 is much corrupted by Lamb. 1124 *Certantes iter* Mar. Ald. 1 Junt. for *Certan-*

1131 invidia quoniam, ceu fulmine, summa vaporant
plerumque et quae sunt aliis magis edita cumque;
1127 ut satius multo iam sit parere quietum
quam regere imperio res velle et regna tenere.
proinde sine incassum defessi sanguine sudent,
angustum per iter luctantes ambitionis;
1133 quandoquidem sapiunt alieno ex ore petuntque
res ex auditis potius quam sensibus ipsis,
nec magis id nunc est neque erit mox quam fuit ante.
  Ergo regibus occisis subversa iacebat 1136
pristina maiestas soliorum et sceptra superba,
et capitis summi praeclarum insigne cruentum
sub pedibus vulgi magnum lugebat honorem;
nam cupide conculcatur nimis ante metutum.
res itaque ad summam faecem turbasque redibat,
imperium sibi cum ac summatum quisque petebat.
inde magistratum partim docuere creare
iuraque constituere, ut vellent legibus uti.
nam genus humanum, defessum vi colere aevom,
ex inimicitiis languebat; quo magis ipsum
sponte sua cecidit sub leges artaque iura.
acrius ex ira quod enim se quisque parabat
ulcisci quam nunc concessumst legibus aequis,
hanc ob rem est homines pertaesum vi colere aevom.
inde metus maculat poenarum praemia vitae.
circumretit enim vis atque iniuria quemque
atque, unde exortast, ad eum plerumque revertit,
nec facilest placidam ac pacatam degere vitam
qui violat factis communia foedera pacis.
etsi fallit enim divom genus humanumque,
perpetuo tamen id fore clam diffidere debet;

tesque inter: *iter* Flor. 31 Brix. Pont. before them. 1127 1128 (1131 1132) I have brought to this place: Lach. puts them after 1135. 1128 *aliis* Lamb. for *altis*. 1131 *sine* Flor. 31 Camb. 3 Vat. Mar. for *side*. 1141 *redibat* Flor. 31 Mar. Ald. 1 Junt. for *recidat*. 1145 *vi colere* Flor. 31 Camb. Mar. for *vicere* A, *vigere* B, *vincere* Nicc.: comp. 1150. 1151 *Inde*. *Unde* Mar. Junt. Lamb. etc. Gif. attributes *inde* to Marullus, from a confusion prob. between the *Inde* which Ven. rightly has, and Marullus' change to *Unde*.

1152 *vis* Camb. Brix. Mar. for *ius*. *circumretitae nimis* Pont. and so in dark ink on an erasure in Mon.; but *enim vis* is written over in a paler ink, like that most

quippe ubi se multi per somnia saepe loquentes
aut morbo delirantes protraxe ferantur
et celata *mala* in medium et peccata dedisse.]
  Nunc quae causa deum per magnas numina gentis
pervulgarit et ararum compleverit urbis
suscipiendaque curarit sollemnia sacra,
quae nunc in magnis florent sacra rebu' locisque,
unde etiam nunc est mortalibus insitus horror
qui delubra deum nova toto suscitat orbi
terrarum et festis cogit celebrare diebus,
non ita difficilest rationem reddere verbis.
quippe etenim iam tum divom mortalia saecla
egregias animo facies vigilante videbant
et magis in somnis mirando corporis auctu.
his igitur sensum tribuebant propterea quod
membra movere videbantur vocesque superbas
mittere pro facie praeclara et viribus amplis.
aeternamque dabant vitam, quia semper eorum
subpeditabatur facies et forma manebat,
et tamen omnino quod tantis viribus auctos
non temere ulla vi convinci posse putabant.
fortunisque ideo longe praestare putabant,
quod mortis timor haut quemquam vexaret eorum,
et simul in somnis quia multa et mira videbant
efficere et nullum capere ipsos inde laborem.
praeterea caeli rationes ordine certo
et varia annorum cernebant tempora verti
nec poterant quibus id fieret cognoscere causis.
ergo perfugium sibi habebant omnia divis
tradere et illorum nutu facere omnia flecti.
in caeloque deum sedes et templa locarunt,
per caelum volvi quia nox et luna videtur,
luna dies et nox et noctis signa severa

used: another indication that Pontanus may have had possession of the ms. before Marullus. 1160 *mala* added by Lach. *diu* Mar. Ald. 1 Junt. vulg. 1177 *Et tamen omnino*. *Et manet omnino* Lamb. most perversely. 1178 *ulla vi* Brix. Mar. Ald. 1 Junt. for *illa vi*. *illa* (*ulla*) Ver. Ven. 1189 *nox*. *lux* Lach. *sol* Lamb. 1190 *severa*. *serena* Candidus at end of Junt. Lach. which Lamb. also prefers: the change of course is very slight; but *severa* is to my taste the more

noctivagaeque faces caeli flammaeque volantes,
nubila sol imbres nix venti fulmina grando
et rapidi fremitus et murmura magna minarum.
 O genus infelix humanum, talia divis
cum tribuit facta atque iras adiunxit acerbas!
quantos tum gemitus ipsi sibi, quantaque nobis
volnera, quas lacrimas peperere minoribu' nostris!
nec pietas ullast velatum saepe videri
vertier ad lapidem atque omnis accedere ad aras
nec procumbere humi prostratum et pandere palmas
ante deum delubra nec aras sanguine multo
spargere quadrupedum nec votis nectere vota,
sed mage pacata posse omnia mente tueri.
nam cum suspicimus magni caelestia mundi
templa, super stellisque micantibus aethera fixum,
et venit in mentem solis lunaeque viarum,
tunc aliis oppressa malis in pectora cura
illa quoque expergefactum caput erigere infit,
nequae forte deum nobis inmensa potestas
sit, vario motu quae candida sidera verset.
temptat enim dubiam mentem rationis egestas,
ecquaenam fuerit mundi genitalis origo,
et simul ecquae sit finis quoad moenia mundi
solliciti motus hunc possint ferre laborem,
an divinitus aeterna donata salute
perpetuo possint aevi labentia tractu
inmensi validas aevi contemnere viris.
praeterea cui non animus formidine divum
contrahitur, cui non correpunt membra pavore,
fulminis horribili cum plaga torrida tellus
contremit et magnum percurrunt murmura caelum?
non populi gentesque tremunt, regesque superbi
corripiunt divum percussi membra timore,

poetical. 1192 *sol. ros* Lamb. 1198 *ullast velatum. ulla velatumst* mss. and eds. before Mar. and Ald. 1. 1203 *pacata* Junt. (not Pont. or Mar.) for *placata*: a necessary correction which Nauger. rejects, but Lamb. ed. 2 and 3 properly adopts. 1207 *in pectora. in pectore* Ald. 1 Junt. followed by Nauger. Lamb. Creech etc. most absurdly. 1214 *Sollicitі* Bentl. for *Et taciti*: he refers to I 343 and VI 1038. *Et tanti* one Vat. Ald. 1 Lamb. 1220 *Fulminis* Mar.

nequid ob admissum foede dictumve superbe
poenarum grave sit solvendi tempus adultum?
summa etiam cum vis violenti per mare venti
induperatorem classis super aequora verrit
cum validis pariter legionibus atque elephantis,
non divom pacem votis adit ac prece quaesit
ventorum pavidus paces animasque secundas,
nequiquam, quoniam violento turbine saepe
correptus nilo fertur minus ad vada leti?
usque adeo res humanas vis abdita quaedam
opterit et pulchros fascis saevasque secures
proculcare ac ludibrio sibi habere videtur.
denique sub pedibus tellus cum tota vacillat
concussaeque cadunt urbes dubiaeque minantur,
quid mirum si se temnunt mortalia saecla
atque potestatis magnas mirasque relinquunt
in rebus viris divum, quae cuncta gubernent?
 Quod superest, aes *at*que aurum ferrumque repertumst
et simul argenti pondus plumbique potestas,
ignis ubi ingentis silvas ardore cremarat
montibus in magnis, seu caeli fulmine misso,
sive quod inter se bellum silvestre gerentes
hostibus intulerant ignem formidinis ergo,
sive quod inducti terrae bonitate volebant
pandere agros pinguis et pascua reddere rura,
sive feras interficere et ditescere praeda.
nam fovea atque igni prius est venarier ortum
quam saepire plagis saltum canibusque ciere.
quidquid id est, quacumque e causa flammeus ardor

Ald. 1 Junt. first for *Fulmini*. *Fulmine* Nicc. *Fulmine terribili* Flor. 31. 1224 *Nequid* Lach. for *Nequod*: a necessary change, if it is joined with *admissum*.
 1225 *adultum* Lach. for *adauctum*. *adactum* Pont. Mar. Ald. 1 Junt. Lamb. etc. 1226 *Summa* Flor. 31 Mar. Ald. 1 Junt. for *Summe*. 1229 *adit ac prece* Flor. 31 Camb. Mar. for *adita prece*. 1230 enclosed by Lach. in [ ].
 1237 *dubiaeque*. *dubiaeve* Bentl.: but see notes 2. 1241 *superest aes atque aurum* Mar. Ald. 1 Junt. for *superest aeque aurum*. 1244 *caeli fulmine misso* BA corr. Nicc. all later mss. and eds.: *caelo* A p. m. alone. *caeli* is quite right: see I 489. *caelo* Lach. who says 'neque dixit alibi Lucretius *fulmen caeli*, sed *plagam caeli* supra 1095': but why his once using *plaga caeli*, should prevent him from twice using *fulmen caeli*, my mind cannot comprehend. 1252 *Quidquid*. *Quicquid* AB; and so the lex Rubria 26 and the ancient and sole ms. of Livy XLV

horribili sonitu silvas exederat altis
ab radicibus et terram percoxerat igni,
manabat venis ferventibus in loca terrae
concava conveniens argenti rivus et auri,
aeris item et plumbi. quae cum concreta videbant
posterius claro in terra splendere colore,
tollebant nitido capti levique lepore
et simili formata videbant esse figura
atque lacunarum fuerant vestigia cuique.
tum penetrabat eos posse haec liquefacta calore
quamlibet in formam et faciem decurrere rerum
et prorsum quamvis in acuta ac tenvia posse
mucronum duci fastigia procudendo,
ut sibi tela darent, silvasque ut caedere possent
materiemque dolare et levia radere tigna
et terebrare etiam ac pertundere perque forare.
nec minus argento facere haec auroque parabant
quam validi primum violentis viribus aeris,
nequiquam, quoniam cedebat victa potestas
nec poterat pariter durum sufferre laborem.
tum fuit in pretio magis *aes* aurumque iacebat
propter inutilitatem hebeti mucrone retusum.
nunc iacet aes, aurum in summum successit honorem.
sic volvenda aetas commutat tempora rerum.
quod fuit in pretio, fit nullo denique honore;
porro aliut succedit et *e* contemptibus exit
inque dies magis adpetitur floretque repertum

32 9: Lucr. may therefore have written *quicquid* here, though elsewhere his mss. have *quidquid* for the relative; *quicquid* in the sense of *quicque*, rightly according to the rule explained in notes 2 to I 22 *quicquam*. 1253 *altis* A Nicc. Flor. 31 Camb. Mon. Brix. Ver. Ven. Junt. *altas* BA corr. Avanc. Lamb. 1254 *Ab* Junt. first for *A*, rightly: not Pont. or Mar. 1258 *in terra splendere* Lach. first for *in terras*. *in terris* Lamb. 1259 *capti* Flor. 31 Ver. Ven. Mar. for *capiti*. 1266 *darent, silvasque ut caedere possent* Lach. for *parent silvasque et cedere possint*. [But perhaps the mss. are right: compare Plaut. Amph. 192 *praemisit ut nuntiem*; and see Ussing there.] 1267 *dolare et levia radere* Mar. Junt. (Ald. 1 has *ac* for *et*) for *dolaret levare ac radere*: which seems the simplest change. *domo, levare ac radere* Lach. *laevare dolare et radere* Lamb. Lach. also suggests *dolare secare ac* or *dolare aequare ac*. 1272 *poterat* Lamb. and Lach. for *poterant*: this I have received with some hesitation. 1273 *Tum* Lach. for *Nam*. *aes* added by Flor. 31 Camb. Pont. Mar. 1278 *e*

laudibus et miro est mortalis inter honore.
Nunc tibi quo pacto ferri natura reperta
sit facilest ipsi per te cognoscere, Memmi.
arma antiqua manus ungues dentesque fuerunt
et lapides et item silvarum fragmina rami,
et flamma atque ignes, postquam sunt cognita primum.
posterius ferri vis est aerisque reperta.
et prior aeris erat quam ferri cognitus usus,
quo facilis magis est natura et copia maior.
aere solum terrae tractabant, aereque belli
miscebant fluctus et vulnera vasta serebant
et pecus atque agros adimebant; nam facile ollis
omnia cedebant armatis nuda et inerma.
inde minutatim processit ferreus ensis
versaque in obprobrium species *est* falcis ahenae,
et ferro coepere solum proscindere terrae
exaequataque sunt creperi certamina belli.
et prius est armatum in equi conscendere costas
et moderarier hunc frenis dextraque vigere
quam biiugo curru belli temptare pericla.
et biiugos prius est quam bis coniungere binos
et quam falciferos armatum escendere currus.
inde boves *lucas* turrito corpore, taetras,
anguimanus, belli docuerunt volnera Poeni
sufferre et magnas Martis turbare catervas.
sic alid ex alio peperit discordia tristis,
horribile humanis quod gentibus esset in armis,
inque dies belli terroribus addidit augmen.
Temptarunt etiam tauros in moenere belli
expertique sues saevos sunt mittere in hostis.
et validos partim prae se misere leones

added by Brix. Pont. Mar. 1285 *flamma atque* B corr. Flor. 31 Camb. 4 Vat. for *flammatque ignes*. *flammae atque* Mar. Nauger. Lamb. etc. 1294 *obprobrium*. *obscenum* all the mss. of Macrob. sat. VI 1 63, collated by Ianus: a curious variation. Lach. who depended on an old edition of Macrobius, is mistaken in supposing that *obscenum* is not the ms. reading. 1297 *armatum*. *reppertum* Lamb. etc. and 1301 *inventum* Mar. Junt. Lamb. etc. for *armatum*: both needless changes.
1300 *biiugos* Faber for *biiugo*: *biiugo* makes the construction extremely harsh, and, as Faber says, has come from 1299. 1302 *taetras* (*tetras*) Lach. for *tetros*: rightly, see 1339. 1310 *partim*. *Parthi* Camb. 2 Vat.: a reading adopted by

cum doctoribus armatis saevisque magistris
qui moderarier his possent vinclisque tenere,
nequiquam, quoniam permixta caede calentes
turbabant saevi nullo discrimine turmas,
terrificas capitum quatientes undique cristas,
nec poterant equites fremitu perterrita equorum
pectora mulcere et frenis convertere in hostis.
inritata leae iaciebant corpora saltu
undique et adversum venientibus ora petebant
et nec opinantis a tergo deripiebant
deplexaeque dabant in terram volnere victos,
morsibus adfixae validis atque unguibus uncis.
iactabantque suos tauri pedibusque terebant
et latera ac ventres hauribant supter equorum
cornibus et terram minitanti fronte ruebant.
et validis socios caedebant dentibus apri
tela infracta suo tinguentes sanguine saevi,
in se fracta suo tinguentes sanguine tela,
permixtasque dabant equitum peditumque ruinas.
nam transversa feros exibant dentis adactus
iumenta aut pedibus ventos erecta petebant,
nequiquam, quoniam ab nervis succisa videres
concidere atque gravi terram consternere casu.
siquos ante domi domitos satis esse putabant,
effervescere cernebant in rebus agundis
volneribus clamore fuga terrore tumultu,
nec poterant ullam partem redducere eorum;
diffugiebat enim varium genus omne ferarum;
ut nunc saepe boves lucae ferro male mactae
diffugiunt, fera facta suis cum multa dedere.

Lamb. Creech Wak. vulg. before Lach. 1311 *doctoribus.* *ductoribus* Ver. Ven. Mar. Ald. 1 Junt. Nauger. Lamb. etc. 1315 Lach. rejects as spurious; and Ed. in ed. 1. 1319 *petebant* Vat. 640 Urbin. Mon. Junt. for *patebant.*
1320 *deripiebant* A Lach. *diripiebant* B Nicc. Flor. 31 Camb. Mon. all before Lach. 1323 *suos.* *sues* Ver. Ven. Avanc. Lamb. etc. 1325 *fronte* Lach. for *mente* which has no meaning. *ad terramque minanti mente* Mar. Lamb. Gif. Creech etc. and this Candidus doubtless meant to read. 1327 1328 Mon. Junt. Lach. and Ed. in small ed. omit the second; Lamb. ed. 1 obelises the first, ed. 2 and 3 both: but see notes 2. 1330 *dentis adactus* Mar. Junt. for *dentis adauctus* B, *dentibus adauctus* A Nicc. Camb. *dentibus ictus* Politian in marg. Flor.

SI FUIT UT FACERENT SED VIX ADDUCOR UT ANTE
NON QUIERINT ANIMO PRAESENTIRE ATQUE VIDERE
QUAM COMMUNE MALUM FIERET FOEDUMQUE FUTURUM
ET MAGIS ID POSSIS FACTUM CONTENDERE IN OMNI
IN VARIIS MUNDIS VARIA RATIONE CREATIS
QUAM CERTO ATQUE UNO TERRARUM QUOLIBET ORBI
sed facere id non tam vincendi spe voluerunt,
quam dare quod gemerent hostes, ipsique perire,
qui numero diffidebant armisque vacabant.
Nexilis ante fuit vestis quam textile tegmen.
textile post ferrumst, quia ferro tela paratur,
nec ratione alia possunt tam levia gigni
insilia ac fusi radii scapique sonantes.
et facere ante viros lanam natura coegit
quam muliebre genus; nam longe praestat in arte
et sollertius est multo genus omne virile;
agricolae donec vitio vertere severi,
ut muliebribus id manibus concedere vellent
atque ipsi pariter durum sufferre laborem
atque opere in duro durarent membra manusque.
At specimen sationis et insitionis origo
ipsa fuit rerum primum natura creatrix,
arboribus quoniam bacae glandesque caducae
tempestiva dabant pullorum examina supter;
unde etiam libitumst stirpis committere ramis
et nova defodere in terram virgulta per agros.
inde aliam atque aliam culturam dulcis agelli
temptabant fructusque feros mansuescere terram
cernebant indulgendo blandeque colendo.
inque dies magis in montem succedere silvas
cogebant infraque locum concedere cultis,
prata lacus rivos segetes vinetaque laeta

29. 1340 *facta.* *fata* B corr. Lach.: but see notes 2. 1341—1346 Lach. justly ejects the last three of these verses as the work of an interpolator; but it is no less certain that the first three are likewise spurious; *Si fuit ut facerent* is obviously a comment on *Sed facere id non tam* cet. Lach. to make sense and grammar is compelled to read *Sic fuit* with Mar. Ald. 1 Junt. Lamb. for *Si fuit*, and to transpose 1342 and 1343: see Camb. Journ. of phil. IV p. 288: 1345=528.
1351 *tela paratur.* *tela parantur* Lamb. perversely. 1368 *terram* Lach. for

collibus et campis ut haberent, atque olearum
caerula distinguens inter plaga currere posset
per tumulos et convallis camposque profusa;
ut nunc esse vides vario distincta lepore
omnia, quae pomis intersita dulcibus ornant
arbustisque tenent felicibus opsita circum.

At liquidas avium voces imitarier ore
ante fuit multo quam levia carmina cantu
concelebrare homines possent aurisque iuvare.
et zephyri, cava per calamorum, sibila primum
agrestis docuere cavas inflare cicutas.
inde minutatim dulcis didicere querellas,
tibia quas fundit digitis pulsata canentum,
avia per nemora ac silvas saltusque reperta,
per loca pastorum deserta atque otia dia.
haec animos ollis mulcebant atque iuvabant
cum satiate cibi; nam tum *haec* sunt omnia cordi.
saepe itaque inter se prostrati in gramine molli
propter aquae rivom sub ramis arboris altae
non magnis opibus iucunde corpora habebant,
praesertim cum tempestas ridebat et anni
tempora pingebant viridantis floribus herbas.
tum ioca, tum sermo, tum dulces esse cachinni
consuerant. agrestis enim tum musa vigebat;
tum caput atque umeros plexis redimire coronis
floribus et foliis lascivia laeta monebat,
atque extra numerum procedere membra moventes
duriter et duro terram pede pellere matrem;
unde oriebantur risus dulcesque cachinni,
omnia quod nova tum magis haec et mira vigebant.
et vigilantibus hinc aderant solacia somni,
ducere multimodis voces et flectere cantus
et supera calamos unco percurrere labro;

terra. 1388 1389 = 1454 1455, and are here quite out of place. 1391 *tum haec sunt omnia* 'ut quidam legunt' says Lamb. for *tum sunt omnia*: comp. 1404. *tum sunt carmina* Lach. *otia* Faber. 1397 *ioca* Flor. 31 Mar. Ald. 1 Junt. for *loca.* 1400 *monebat* Flor. 31 Mar. Junt. for *movebat.* 1405 *solacia somni* Lamb. Lach. for *solacia somno.* 'secutus sum codicem Vaticanum' says Lamb. All the mss. at present in the Vatican have, I believe, *somno*: but again and again

unde etiam vigiles nunc haec accepta tuentur
et numerum servare *recens* didicere, neque hilo
maiorem interea capiunt dulcedini' fructum
quam silvestre genus capiebat terrigenarum.
nam quod adest praesto, nisi quid cognovimus ante
suavius, in primis placet et pollere videtur,
posteriorque fere melior res illa reperta
perdit et immutat sensus ad pristina quaeque.
sic odium coepit glandis, sic illa relicta
strata cubilia sunt herbis et frondibus aucta.
pellis item cecidit vestis contempta ferinae;
quam reor invidia tali tunc esse repertam,
ut letum insidiis qui gessit primus obiret,
et tamen inter eos distractam sanguine multo
disperiisse neque in fructum convertere quisse.
tunc igitur pelles, nunc aurum et purpura curis
exercent hominum vitam belloque fatigant;
quo magis in nobis, ut opinor, culpa resedit.
frigus enim nudos sine pellibus excruciabat
terrigenas; at nos nil laedit veste carere
purpurea atque auro signisque ingentibus apta,
dum plebeia tamen sit quae defendere possit.
ergo hominum genus incassum frustraque laborat
semper et *in* curis consumit inanibus aevom,
nimirum quia non cognovit quae sit habendi
finis et omnino quoad crescat vera voluptas.
idque minutatim vitam provexit in altum
et belli magnos commovit funditus aestus.

At vigiles mundi magnum versatile templum
sol et luna suo lustrantes lumine circum
perdocuere homines annorum tempora verti

Lamb. speaks in the same vague way of Vatican and other mss. 1409 *servare recens* Ed. for *servare genus*: *servare* first absorbed the *re*, then *cens* became *genus*. *sonis* Lach. Certainly *genus* is quite unmeaning. *numeris* Nicc. as well as Flor. 31 Ver. Ven. Avanc. in Ald. 1; but at end of his Catullus he bids us read *numerum*.

1410 *Maiorem* Flor. 31 Camb. for *Maiore.* *dulcedini'* Lamb. rightly for *dulcedine.* 1418 *ferinae* Junt. (not Pont. or Mar.) for *ferina.* *vestis contemta ferinast* Lamb. ed. 2 and 3. 1419 *tunc* Brix. Pont. Mar. Ald. 1 Junt. for *nunc.* 1431 *in* added by Flor. 31 Camb. Mon. Pont. Ald. 1 Junt. 1436 *magnum versatile.* *magnum ac versatile* Ed. in small ed.; and *ac* may have fallen

et certa ratione geri rem atque ordine certo.
  Iam validis saepti degebant turribus aevom
et divisa colebatur discretaque tellus,
iam mare velivolis florebat puppibus; urbes
auxilia ac socios iam pacto foedere habebant,
carminibus cum res gestas coepere poetae
tradere; nec multo priu' sunt elementa reperta.
propterea quid sit prius actum respicere aetas
nostra nequit, nisi qua ratio vestigia monstrat.
  Navigia atque agri culturas moenia leges
arma vias vestes *et* cetera de genere horum,
praemia, delicias quoque vitae funditus omnis,
carmina picturas, et daedala signa polire,
usus et impigrae simul experientia mentis
paulatim docuit pedetemtim progredientis.
sic unumquicquid paulatim protrahit aetas
in medium ratioque in luminis erigit oras.
namque alid ex alio clarescere et ordine debet
artibus, ad summum donec venere cacumen.

out after *m*: *et* is added by Mar. Ald. 1 Junt. Lamb. vulg. *versatili'* Lach. 1442 *Iam* Lach. for *Tum*. *propter odores* all mss. which Wak. absurdly defends. *puppibus* (*puppib.*) *et res* Lach. *puppibus* is unquestionably right; but *res* appears strange without any epithet; I have written therefore *puppibus; urbes*. *Tum mare velivolum florebat navibu' pandis* Junt. (not Pont. or Mar.) Lamb. etc. probably after Servius. 1449 *et* added by Flor. 31 Camb. 1451 *polire* Flor. 31 Vat. 640 Urbin. and 1954 Othob. Mar. Ald. 1 Junt. Lamb. Lach. for *polito*. 1455 *erigit*. *eruit* Junt. (not Pont. or Mar.) Lamb. etc. wrongly. 1456 *clarescere et ordine debet* Ed. for *clarescere corde videbant*: one *e* was absorbed by the other; then *tordine debet* passed into *corde videbant*. *clarescere conveniebat* Lach. who joins *Artibus* with *venere*.

T. LUCRETI CARI

DE RERUM NATURA

LIBER SEXTUS

Primae frugiparos fetus mortalibus aegris
dididerunt quondam praeclaro nomine Athenae
et recreaverunt vitam legesque rogarunt,
et primae dederunt solacia dulcia vitae,
cum genuere virum tali cum corde repertum,
omnia veridico qui quondam ex ore profudit;
cuius et extincti propter divina reperta
divolgata vetus iam ad caelum gloria fertur.
nam cum vidit hic ad victum quae flagitat usus
omnia iam ferme mortalibus esse parata
et, proquam posset, vitam consistere tutam,
divitiis homines et honore et laude potentis
affluere atque bona gnatorum excellere fama,
nec minus esse domi cuiquam tamen anxia corda,
atque animi ingratis vitam vexare *sine ulla*
pausa atque infestis cogei saevire querellis,

1 *frugiparos* AB. *frugiferos* A corr. Nicc. and later mss. and eds. before Wak. 4 *solacia* Nicc. for *solaci*. 7 *extincti* Mar. Ald. 1 Junt. for *extincta*. 10 *mortalibus* Nicc. for *acortalibus*. 11 *proquam posset* Lach. for *proquam possent*: a simple and certain correction of a much-vexed passage. *per quae possent* Mar. Avanc. Madvig, deceived by this, conjectured in Henrichsen de frag. Gott. *per quae possent vita c. tuta*. Lamb. and Creech obelise the verse. 13 *excellere* Mar. Ald. 1 Junt. for *excolere* A Nicc., *excollere* B. *extollere* Flor. 31 Camb. Pont. 14 *corda* Mar. Ald. 1 Junt. for *cordi*. 15 *querellis* of mss. has of course come from 16 and has supplanted the words of Lucr. who wrote *sine ulla Pausa atque*. Lach. retains *querellis* here and in 16 reads *Passimque...periclis*. *cogei* Lach., *cogi* Lamb., rightly for *coget*: a common corruption in our mss. Mar. Avanc. Junt. corrupt the passage greatly. Lamb. followed by Gif. Creech, etc.

intellegit ibi vitium vas efficere ipsum
omniaque illius vitio corrumpier intus
quae conlata foris et commoda cumque venirent;
partim quod fluxum pertusumque esse videbat,
ut nulla posset ratione explerier umquam;
partim quod taetro quasi conspurcare sapore
omnia cernebat, quaecumque receperat, intus.
veridicis igitur purgavit pectora dictis
et finem statuit cuppedinis atque timoris
exposuitque bonum summum quo tendimus omnes
quid foret, atque viam monstravit, tramite parvo
qua possemus ad id recto contendere cursu,
quidve mali foret in rebus mortalibu' passim,
quod fieret naturali varieque volaret
seu casu seu vi, quod sic natura parasset,
et quibus e portis occurri cuique deceret,
et genus humanum frustra plerumque probavit
volvere curarum tristis in pectore fluctus.
nam veluti pueri trepidant atque omnia caecis
in tenebris metuunt, sic nos in luce timemus
interdum, nilo quae sunt metuenda magis quam
quae pueri in tenebris pavitant finguntque futura.
hunc igitur terrorem animi tenebrasque necessest
non radii solis nec lucida tela diei
discutiant, sed naturae species ratioque.
quo magis inceptum pergam pertexere dictis.
  Et quoniam docui mundi mortalia templa
esse *et* nativo consistere corpore caelum,

contracts the two verses into one, thus *Atque animum infestis cogi servire querelis*: *servire* also Ver. Ven. Mar. Ald. 1 Junt. *Causam quae* Avanc. Nauger. for *Pausa atque.* 17 *vas* Mar. Ald. 1 Junt. for *fas.* 25 *cuppedinis* A rightly, as v 45; and so Marullus in marg. of cod. Victor. properly corrects: Lactantius inst. VII 27 has *torpedinis*, from whom Mar. probably got his first notion mentioned by Gifanius: see n. to III 994: unless he rather when young derived it from his master Pontanus who expressly notes '*torpedinis* est apud Lactantium'. 27 *tramite parvo.* *tramite prono* Lamb. *limite prono* Junt. apparently after Lactantius inst. VII 27. Lach. rightly joins *tramite parvo* with what follows. 28 *recto* A corr. Nicc. Flor. 31 Camb. Mon. Lactant. for *recta.* 30 *fieret* Iac. Susius in Tonson, Lach. for *fuerit.* *flueret* Mar. Ald. 1 Junt. vulg. *naturali.* *naturae vi* Lamb. *naturali viro atque* Mar. Ald. 1 Junt. 31 *casu.* *causa* Lach. 32 *Et quibus* Flor. 31 Camb. Pont. Mar. for *E quibus.* 34 *Volvere* Ver. Ven. Mar. for *Volnere.* 44 *et*

et quaecumque in eo fiunt fierique necessest,
pleraque ressolui, quae restant percipe porro,
quandoquidem semel insignem conscendere currum
*
ventorum, ex ira ut placentur, *ut* omina rursum
quae fuerint sint placato conversa furore:
cetera quae fieri in terris caeloque tuentur
mortales, pavidis cum pendent mentibu' saepe,
et faciunt animos humilis formidine divom
depressosque premunt ad terram propterea quod
ignorantia causarum conferre deorum
cogit ad imperium res et concedere regnum.
nam bene qui didicere deos securum agere aevom,
si tamen interea mirantur qua ratione
quaeque geri possint, praesertim rebus in illis
quae supera caput aetheriis cernuntur in oris,
rursus in antiquas referuntur religionis
et dominos acris adsciscunt, omnia posse

added by Flor. 31 Camb. Brix. Mar. 46 *ressolui* Goebel obs. Lucr. p. 18 for *dissolui*: comp. v 773 *Qua fieri quicquid posset ratione resolvi*: a friend suggests that IV 500 *dissolvere causam* may support *dissolui* here: but see notes 2. *fiunt, fateare necessest Pleraque dissolui* Lach. most unsuitably, as if only *pleraque*, not *omnia*, were to be dissolved. *fiunt possuntque, n. P. dissolui* Bern. to which the same objection applies. Lamb. seeing this difficulty, in ed. 2 and 3 gives *fiunt fientque, necesse Esse ea dissolui.* 47—49 an exceedingly corrupt passage; yet I fancy that I have amended it without much violence: in 47 I have changed nothing; after it there is manifestly a hiatus of several verses, the general sense of which I have attempted to give in my translation. The ms. reading of 48 and 49 is as follows, *Ventorum exirtant placentur omnia rursum Que fuerint sint placato conversa favore*: with *exirtant* for *ex ira ut*, comp. IV 820 *virtuti* for *vir uti.* *omnia* for *omina* is an almost unfailing blunder of mss. *furore* is from Lamb. ed. 2 and 3, and Auratus for *favore.* So Sen. Octav. 800 and 806 mss. have *furore* and *furor* for *favore* and *favor.* The older emendations in Ald. 1 Junt. Lamb. etc. are so devoid of all probability that I will not cite them: Lamb. indeed believes the lines not to be Lucretius'; nor is Lachmann's text much happier: *institui conscendere currum Ventosum et certant plangentia flamina rursum, Quae fuerint, sine, placato conversa furore*: then at 50 he begins a new paragraph, and 52 for *Et faciunt* gives *Haec faciunt*, though Lactantius twice over has the ms. reading. Bern. supposes a lacuna both before and after 48 which he thus leaves, *Ventorum existant, placentur omnia rursum*: 52 Mar. Junt. Lamb. etc. for *Et faciunt* have *Efficiunt.* 56 57 = 90 91 = I 153 154: here in the 6th book Lach. rejects them in the first, retains them in the second place: to me it is manifest that in both places they come from the annotator who thought they were in point and consequently jotted them down in

quos miseri credunt, ignari quid queat esse,
quid nequeat, finita potestas denique cuique
quanam sit rationi atque alte terminus haerens;
quo magis errantes caeca ratione feruntur.
quae nisi respuis ex animo longeque remittis
dis indigna putare alienaque pacis eorum,
delibata deum per te tibi numina sancta
saepe oberunt; non quo violari summa deum vis
possit, ut ex ira poenas petere inbibat acris,
sed quia tute tibi placida cum pace quietos
constitues magnos irarum volvere fluctus,
nec delubra deum placido cum pectore adibis,
nec de corpore quae sancto simulacra feruntur
in mentes hominum divinae nuntia formae,
suscipere haec animi tranquilla pace valebis.
inde videre licet qualis iam vita sequatur.
quam quidem ut a nobis ratio verissima longe
reiciat, quamquam sunt a me multa profecta,
multa tamen restant et sunt ornanda politis
versibus; est ratio caeli *species*que tenenda,
sunt tempestates et fulmina clara canenda,
quid faciant et qua de causa cumque ferantur;
ne trepides caeli divisis partibus amens,
unde volans ignis pervenerit aut in utram se
verterit hinc partim, quo pacto per loca saepta
insinuarit, et hinc dominatus ut extulerit se.
tu mihi supremae praescribta ad candida calcis
currenti spatium praemonstra, callida musa
Calliope, requies hominum divomque voluptas,

the margin in his usual fashion. 68 *longeque* Nicc. for *longique*. *remittis* Flor. 31 Camb. Brix. for *remitti*. 71 *oberunt* Wak. for *oderunt*. *aderunt* Mar. Ald. 1 Junt. Lamb. etc. 72 *ex ira* Mar. Ald. 1 Junt. for *exire*. 73 *quietos* Mar. Junt. for *quietus*. 74 *fluctus* Flor. 31 Mar. Ald. 1 Junt. for *fletus*.
76 *feruntur* Brix. Ald. 1 Junt. (not Pont. or Mar.) for *fuerunt*. *ferunt* Ver. Ven.
82 *sunt ornanda*. *sunt tornanda* Flor. 31 Politian in marg. Flor. 29.
83 *est ratio caeli* (*caelis* Brix.) *speciesque tenenda* Brix. Avanc. Lamb. ed. 1 and 2 for *est ratio caelisque tenenda:* the scribe omitted *specie* because of the following *squete*. *est ratio fulgendi visque tonandi* Lach. which seems to me most improbable. *est ratio superum caelique* Flor. 31 Camb. 2 Vat. Lamb. ed. 3. 85—89 Lach. encloses in [ ]. 90 91=56 57=I 153 154: see above. Lach. admits them here. 92 *ad candida calcis* Lamb. and Turnebus for *ac candida callis*: a certain

te duce ut insigni capiam cum laude coronam.
Principio tonitru quatiuntur caerula caeli
propterea quia concurrunt sublime volantes
aetheriae nubes contra pugnantibu' ventis.
nec fit enim sonitus caeli de parte serena,
verum ubicumque magis denso sunt agmine nubes,
tam magis hinc magno fremitus fit murmure saepe.
praeterea neque tam condenso corpore nubes
esse queunt quam sunt lapides ac tigna, neque autem
tam tenues quam sunt nebulae fumique volantes;
nam cadere aut bruto deberent pondere pressae
ut lapides, aut ut fumus constare nequirent
nec cohibere nives gelidas et grandinis imbris.
dant etiam sonitum patuli super aequora mundi,
carbasus ut quondam magnis intenta theatris
dat crepitum malos inter iactata trabesque;
interdum perscissa furit petulantibus auris
et fragilis *sonitus* chartarum commeditatur:
id quoque enim genus in tonitru cognoscere possis:
aut ubi suspensam vestem chartasque volantis
verberibus venti versant planguntque per auras.
fit quoque enim interdum *ut* non tam concurrere nubes
frontibus adversis possint quam de latere ire
diverso motu radentes corpora tractim,
aridus unde auris terget sonus ille diuque
ducitur, exierunt donec regionibus artis.

emendation. 102 *nubes* Flor. 31 Pont. Mar. Ald. 1 Junt. for *nure*. *mire* Nicc. Brix. Ver. Ven. 103 *lapides* Flor. 31 Ver. Ven. for *pepides*. *tigna* Flor. 31 Camb. Mar. Junt. for *iigna*. *ugna* Nicc. *ligna* Ver. Ven. Avanc. 105 *Nam cadere aut bruto* Flor. 31 Camb. all Vat. Brix. Ver. Ven. Mar. Junt. for *Nam cadere avi* B, *Nam candere aut* A corr. (says Lach. but ? p. m. also) Nicc. *aut* is unquestionably right: comp. 1198 *avi* mss. for *aut*. *Nam cadere abrupto* Avanc. *Nam aut cadere abrupto* Lamb. *ab bruto* Lach. 110 *malos* Flor. 31 Mar. Junt. for *matos*. *muros* Brix. Avanc. *matos* (*muros*) Ver. Ven. 112 *sonitus* added by Flor. 31 Camb. etc. 114 *que*. *ve* Mar. Junt. Lach. 115 *planguntque* Pont. Mar. Junt. for *planguentque*. 116 *ut* added by Flor. 31 Vat. 640 Urbin. and 1136 Othob. Pius. 118 *corpora tractim* Gronov. Faber for *corpore tractim*. 'f. *corpora tactu*' Heins. in ms. notes. *corpore tractum* Nicc. Flor. 31 Camb. all Vat. etc. *corpori' tractum* Mar. Junt. 120 *exierunt* Vat. 1706 Reg. for *exierum*: also Heins. in ms. notes has '*exierunt* s' i.e. the ms. of Modius who must therefore have read in it *exierunt*, as the ed. Paris. 1565 has *exierit*, as well as Lamb. ed. 1

Hoc etiam pacto tonitru concussa videntur
omnia saepe gravi tremere et divolsa repente
maxima dissiluisse capacis moenia mundi,
cum subito validi venti conlecta procella
nubibus intorsit sese conclusaque ibidem
turbine versanti magis ac magis undique nubem
cogit uti fiat spisso cava corpore circum,
post ubi comminuit vis eius et impetus acer,
tum perterricrepo sonitu dat scissa fragorem.
nec mirum, cum plena animae vensicula parva
saepe ita dat torvum sonitum displosa repente.
Est etiam ratio, cum venti nubila perflant,
ut sonitus faciant. etenim ramosa videmus
nubila saepe modis multis atque aspera ferri;
scilicet ut, crebram silvam cum flamina cauri
perflant, dant sonitum frondes ramique fragorem.
fit quoque ut interdum validi vis incita venti
perscindat nubem perfringens impete recto.
nam quid possit ibi flatus manifesta docet res,
hic, ubi lenior est, in terra cum tamen alta
arbusta evolvens radicibus haurit ab imis.
sunt etiam fluctus per nubila, qui quasi murmur
dant in frangendo graviter; quod item fit in altis
fluminibus magnoque mari, cum frangitur *aestus.*
fit quoque, ubi e nubi in nubem vis incidit ardens
fulminis, haec multo si forte umore recepit
ignem, continuo *ut* magno clamore trucidet;
ut calidis candens ferrum e fornacibus olim

and 3. Is. Voss. too and Creech prefer *exierunt*. *exierit* Flor. 31 Camb. 3 Vat. Ald. 1 Junt. Lamb. *exierint* Brix. Ver. Ven. Mar.; but *exierit* Mar. ap. Victor. in ed. Ven. 124 *concollecta* AB. *conlecta* Nicc. Brix. *collecta* A corr. Camb.
128 *conminuit*. *commovit* A corr. Flor. 31 Camb. Mon. Brix. Ver. Ven. vulg. before Lach. 129 *scissa* Bern. for *missa*. *fissa* Lach.: it is clearly the *nubes*, not the *procella*, which is here spoken of; though all editors before Lach. retain *missa*, which Isidore too orig. XIII 8 must have read: the corruption therefore must be old. 131 *torvum* Ed. for *parvum*. *magnum* Is. Voss. in ms. notes and Wak. *pariter* Mar. Junt. Lamb. etc. *Saepe det haut parvum* Lach. *Noenu ita det p.* Bern.: but see notes 2. 132 and 136 *perflant* A corr. Nicc. for *perfiant*.
133 *Ut*. *Cur* Lamb. wrongly. 141 *Arbusta evolvens* A corr. Flor. 31 Pont. Mar. for *Arbusta volvens*. *Arbuste volvens* Nicc. Camb. 144 *aestus* Flor. 31 Camb. etc. for *aest*. *aestu* A corr. Nicc. Mon. Ver. Ven. vulg. 147 *ut* added

stridit, ubi in gelidum propere demersimus imbrem.
aridior porro si nubes accipit ignem,
uritur ingenti sonitu succensa repente;
lauricomos ut si per montis flamma vagetur
turbine ventorum comburens impete magno;
nec res ulla magis quam Phoebi Delphica laurus
terribili sonitu flamma crepitante crematur.
denique saepe geli multus fragor atque ruina
grandinis in magnis sonitum dat nubibus alte.
ventus enim cum confercit, franguntur, in artum,
concreti montes nimborum et grandine mixti.
Fulgit item, nubes ignis cum semina multa
excussere suo concursu; ceu lapidem si
percutiat lapis aut ferrum; nam tum quoque lumen
exilit et claras scintillas dissipat ignis.
sed tonitrum fit uti post auribus accipiamus,
fulgere quam cernant oculi, quia semper ad auris
tardius adveniunt quam visum quae moveant res.
id licet hinc etiam cognoscere: caedere si quem
ancipiti videas ferro procul arboris auctum,
ante fit ut cernas ictum quam plaga per auris
det sonitum; sic fulgorem quoque cernimus ante
quam tonitrum accipimus, pariter qui mittitur igni
e simili causa, concursu natus eodem.
Hoc etiam pacto volucri loca lumine tingunt
nubes et tremulo tempestas impete fulgit.
ventus ubi invasit nubem et versatus ibidem
fecit ut ante cavam docui spissescere nubem,
mobilitate sua fervescit; ut omnia motu
percalefacta vides ardescere, plumbea vero
glans etiam longo cursu volvenda liquescit.

by Lamb. *trucidet* Junt. not Pont. or Mar. for *trucidat*. Lach. on the contrary in 145 for *Fit* reads *Id*. 149 *propere* Mar. Ald. 1 Junt. for *propter*. 151 *repente* Flor. 31 Brix. Pont. for *recente*. 154 *res ulla* Macrob. sat. VI 4 5 for *res uita*. *res ulla uita* Ver. Ven. *resina* Flor. 31 Camb. 158 *in artum*. *in arto* Lach.: but somewhat involved constructions are by no means avoided by Lucr.: comp. 176 and III 843. 165 *Fulgere* Nicc. B corr. for *Fugere*. 168 *Ancipiti* Flor. 31 Mon. Brix. for *Ungipiti*. *videas* Mar. Junt. for *videat*. 172 *E simili* A Nicc. Flor. 31 (Lach. wrongly assigns to it *Et*) 2 Vat. Brix. Mar. Junt. Lamb. *Et simili* B Camb. Mon. 3 Vat. Ver. Ven. Avanc. 179 *liquescit* Pont. Mar.

ergo fervidus hic nubem cum perscidit atram,
dissipat ardoris quasi per vim expressa repente
semina quae faciunt nictantia fulgura flammae;
inde sonus sequitur qui tardius adficit auris
quam quae perveniunt oculorum ad lumina nostra.
scilicet hoc densis fit nubibus et simul alte
extructis aliis alias super impete miro;
ne tibi sit frudi quod nos inferne videmus
quam sint lata magis quam sursum extructa quid extent.
contemplator enim, cum montibus adsimulata
nubila portabunt venti transversa per auras,
aut ubi per magnos montis cu*mu*lata videbis
insuper esse aliis alia atque urguere superne
in statione locata sepultis undique ventis:
tum poteris magnas moles cognoscere eorum
speluncasque velut saxis pendentibu' structas
cernere, quas venti cum tempestate coorta
conplerunt, magno indignantur murmure clausi
nubibus in caveisque ferarum more minantur;
nunc hinc nunc illinc fremitus per nubila mittunt
quaerentesque viam circum versantur et ignis
semina convolvunt *e* nubibus atque ita cogunt
multa rotantque cavis flammam fornacibus intus,
donec divolsa fulserunt nube corusci.
  Hac etiam fit uti de causa mobilis ille
devolet in terram liquidi color aureus ignis,
semina quod nubes ipsas permulta necessust
ignis habere; etenim cum sunt umore sine ullo,
flammeus est plerumque colos et splendidus ollis.

Ald. 1 Junt. for *quiescit*: a certain correction. *calescit* Lach. utterly destroying the force of the passage. 180 *perscidit* Flor. 31 Camb. Mon. Brix. for *perscindit*. 183 *adficit* Bentl. for *adlicit*. *adtigit* Lamb. conj. *adcidit* Heins. in ms. notes. 184 *lumina* B. *limina* A Nicc. Flor. 31 three Vat. 185 *alte* Mar. Ald. 1 Junt. for *alti*. 187 188 wrongly placed by Lach. after 193 on account of the neuters: see 759 I 352 IV 934. 187 *Ne*. *Nec* Mon. Lach. 188 *sint* Mar. Junt. for *sit*. *extructa* Ald. 1 Junt. for *extricta*. 191 *cumulata* B corr. Brix. Ver. Ven. Mar. for *culata*. *procul alta* Flor. 31 Camb. 192 *urguere* A Nicc. *urgere* B. *superne* Bentl. for *superna*. 201 *e* added by Nicc. 205 *color* Serv. ad ecl. VI 33, Mar. Avanc. Nauger. *calor* AB Nicc. Flor. 31 Camb. Junt. mss. of Macrob. sat. VI 5 4: yet *color* must be right: the mss. of Macrobius sometimes agree strangely with those of Lucr. in corruptions. 208 *Flammeus est*

quin etiam solis de lumine multa necessest
concipere, ut merito rubeant ignesque profundant.
hasce igitur cum ventus agens contrusit in unum
compressitque locum cogens, expressa profundunt
semina quae faciunt flammae fulgere colores.
fulgit item, cum rarescunt quoque nubila caeli.
nam cum ventus eas leviter diducit euntis
dissoluitque, cadant ingratis illa necessest
semina quae faciunt fulgorem. tum sine taetro
terrore et sonitu fulgit nulloque tumultu.
  Quod superest, *quali* natura praedita constent
fulmina, declarant ictus et inusta vaporis
signa notaeque gravis halantis sulpuris auras.
ignis enim sunt haec non venti signa neque imbris.
praeterea sae*pe* accendunt quoque tecta domorum
et celeri flamma dominantur in aedibus ipsis.
hunc tibi subtilem cum primis ignibus ignem
constituit natura minutis mobilibusque
corporibus, cui nil omnino obsistere possit.
transit enim validum fulmen per saepta domorum,
clamor ut ac voces, transit per saxa, per aera,
et liquidum puncto facit aes in tempore et aurum,
curat item vasis integris vina repente
diffugiant, quia nimirum facile omnia circum
conlaxat rareque facit lateramina vasis
adveniens calor eius et insinuatus in ipsum
mobiliter soluens differt primordia vini.

Flor. 31 Camb. Mar. for *Flammeusq*. *splendidus ollis* Flor. 31 Mar. Camb. corr. but p. m., Mar. for *splendidusolis*. 209 *Quin etiam* Lach. for *Quippe enim*. *Quippe etenim* vulg. 210 *rubeant* Flor. 31 Camb. Brix. Pont. Mar. for *iubeant*. 213 *fulgere*. *fulgore* Avanc. Lach. in defiance of Epicurus and Lucretius assigning colour to atoms. 216 *ingratis* Pius in notes for *ingratius*. 218 *sonitu* Vat. 1954 Othob. Mar. Ald. 1 Junt. for *sonis*. *sonitis* Flor. 31 Camb. one Vat. *atque sonis* Pont. 219 *quali* added by Lamb. *quod sic* Flor. 31 Camb. 220 *ictus et* Flor. 31 Pont. Mar. Ald. 1 Junt. vulg. for *ictu et*. *ictu loca* Lach. 221 *auras* Mon. (or Mar.) Junt. for *auris*. 223 *saepe* Is. Voss. in ms. notes for *se*. *per se* Flor. 31 vulg. 226 *mobilibusque* Ald. 1 Junt. (not Pont. or Mar.) for *montibusque*. 228 229 Lach. makes one verse out of these two by omitting *per s. d. C. ut ac v. tr.* 229 *saxa* B corr. for *sasca*. 231 *Curat item*. *Curat utei* Lach. *Curat item ut* Lamb.: but surely there is sufficient authority for omitting *ut* after *curat*. 234 *et insinuatus* Lach. for *ut insinuatus*.

quod solis vapor aetatem non posse videtur
efficere usque adeo pellens fervore corusco:
tanto mobilior vis et dominantior haec est.

Nunc ea quo pacto gignantur et impete tanto
fiant ut possint ictu discludere turris,
disturbare domos, avellere tigna trabesque,
et monimenta virum demoliri atque cremare,
exanimare homines, pecudes prosternere passim,
cetera de genere hoc qua vi facere omnia possint,
expediam, neque *te* in promissis plura morabor.

Fulmina gigni*er* e crassis alteque putandumst
nubibus extructis; nam caelo nulla sereno
nec leviter densis mittuntur nubibus umquam.
nam dubio procul hoc fieri manifesta docet res;
quod tum per totum concrescunt aera nubes,
undique uti tenebras omnis Acherunta reamur
liquisse et magnas caeli complesse cavernas:
usque adeo taetra nimborum nocte coorta
inpendent atrae formidinis ora superne:
cum commoliri tempestas fulmina coeptat.
praeterea persaepe niger quoque per mare nimbus,
ut picis e caelo demissum flumen, in undas
sic cadit effertus tenebris procul et trahit atram
fulminibus gravidam tempestatem atque procellis,
ignibus ac ventis cum primis ipse repletus,
in terra quoque ut horrescant ac tecta requirant.
sic igitur supera nostrum caput esse putandumst
tempestatem altam. neque enim caligine tanta
obruerent terras, nisi inaedificata superne

ut insinuatur Nicc. Flor. 31 Camb. vulg.: but *ut* for *ubi* is not Lucretian. 237 *pellens* Ed. for *tellens*. *tollens* A corr. Nicc. *pollens* Lamb. vulg. Lach. *cellens* Wak. 241 *tigna* Lamb. first (not Flor. 31) for *igna*. *ligna* Nicc. later mss. and eds. before Lamb. 242 *demoliri* Mar. Ald. 1 Junt. for *commoliri*: prepositions seem often to be confounded in our mss. *cremare* Ed. for *ciere* which has no meaning: the last letters, which were on the outside margin of this the 259th page of the archetype, were lost. *lamenta* Lach. for *monimenta*: a violent change which destroys the whole force of the passage. 245 *te* added by Flor. 31 Camb. Pont. Mar. 246 *gignier* Mar. Ald. 1 Junt. for *gigni*. *nunc gigni* Flor. 31 Camb. *crassis* Nicc. for *classis*. 250 *tum* Lach. for *tunc*. 257 *demissum flumen* Junt. for *dimissum fulmen*. *demissum fulmen* Mar. Avanc. which is repeated as a correction at the end of his Catullus and must be a misprint for

multa forent multis exempto nubila sole;
nec tanto possent venientes opprimere imbri,
flumina abundare ut facerent camposque natare,
si non extructis foret alte nubibus aether.
hic igitur ventis atque ignibus omnia plena
sunt; ideo passim fremitus et fulgura fiunt.
quippe etenim supra docui permulta vaporis
semina habere cavas nubes et multa necessest
concipere ex solis radiis ardoreque eorum.
hoc ubi ventus eas idem qui cogit in unum
forte locum quemvis, expressit multa vaporis
semina seque simul cum eo commiscuit igni,
insinuatus ibi vortex versatur in arto
et calidis acuit fulmen fornacibus intus.
nam duplici ratione accenditur, ipse sua cum
mobilitate calescit et e contagibus ignis.
inde ubi percaluit venti vis *et* gravis ignis
impetus incessit, maturum tum quasi fulmen
perscindit subito nubem, ferturque coruscis
omnia luminibus lustrans loca percitus ardor.
quem gravis insequitur sonitus, displosa repente
opprimere ut caeli videatur templa superne.
inde tremor terras graviter pertemptat et altum
murmura percurrunt caelum; nam tota fere tum
tempestas concussa tremit fremitusque moventur.
quo de concussu sequitur gravis imber et uber,
omnis uti videatur in imbrem vertier aether
atque ita praecipitans ad diluviem revocari:
tantus discidio nubis ventique procella
mittitur, ardenti sonitus cum provolat ictu.
est etiam cum vis extrinsecus incita venti

flumen. 258 *effertus* Lach. for *et fertus*. *et fertur* vulg. 269 *plena* Flor. 31 Camb. Mon. etc. for *plana*. 272 *habere* Pont. Mar. Ald. 1 Junt. for *haecdere*. *hac de re* Nicc. 277 *arto* Lach. for *alto*. 281 *venti vis et gravis ignis* Bentl. for *gravis venti vis igni*. *gravida, aut vis ignis et acer* Lach. *vis venti vel gravis ignis* Mar. Junt. Lamb. etc. 286 *videatur* Ed. for *videantur*: the scribe has adapted the verb to *templa*: see I 1108: in 467 *videatur* mss. for *videantur*. Lach. reads *Exprimere* for *Opprimere*, Bern. *Occidere*. 290 *concussu* B corr. Pont. Mar. Ald. 1 Junt. for *concussus*. 291 *uti* Pont. Mar. Ald. 1 Junt. for *ut*. *ita ut* Flor. 31 Camb. 292 *revocari* Lach. for *revocare*. 296 *calidam*

incidit in calidam maturo fulmine nubem ;
quam cum perscidit, extemplo cadit igneus ille
vertex quem patrio vocitamus nomine fulmen.
hoc fit idem in partis alias, quocumque tulit vis.
fit quoque ut interdum venti vis missa sine igni
igniscat tamen in spatio longoque meatu,
dum venit, amittens in cursu corpora quaedam
grandia quae nequeunt pariter penetrare per auras ;
atque alia ex ipso conradens aere portat
parvola quae faciunt ignem commixta volando ;
non alia longe ratione ac plumbea saepe
fervida fit glans in cursu, cum multa rigoris
corpora dimittens ignem concepit in auris.
fit quoque ut ipsius plagae vis excitet ignem,
frigida cum venti pepulit vis missa sine igni,
nimirum quia, cum vementi perculit ictu,
confluere ex ipso possunt elementa vaporis
et simul ex illa quae tum res excipit ictum ;
ut, lapidem ferro cum caedimus, evolat ignis,
nec, quod frigida vis ferrist, hoc setius illi
semina concurrunt calidi fulgoris ad ictum.
sic igitur quoque res accendi fulmine debet,
opportuna fuit si forte et idonea flammis.
nec temere omnino plane vis frigida venti
esse potest, ea quae tanta vi missa supernest,
quin, prius in cursu si non accenditur igni,
at tepefacta tamen veniat commixta calore.
  Mobilitas autem fit fulminis et gravis ictus,
et celeri ferme percur*run*t fulmina lapsu,
nubibus ipsa quod omnino prius incita se vis

Bern. rightly for *valida*. *gravidam* Bentl. Lach. *fulmine* Mar. Ald. 1 Junt. for *culmine*. 298 *patrio* Flor. 31 Camb. 3 Vat. etc. for *spatio*. *quam spatio* (*quem patrio*) Ver. Ven. *Latio* B corr., perhaps rightly. *quem*. *quod* Camb. 2 Vat. Mar. Junt. Lamb. 302 *Dum venit, amittens*. 'Immo *Cum venit amittens* : alioquin oratio non constat' Lach. 308 *concepit* Flor. 31 Camb. Mon. Ver. Ven. for *concipit*. 309 *ipsius* Mar. Ald. 1 Junt. for *ipsis*. 315 *illi* Lach. for *ille*. *illa* Flor. 31 vulg. 320 *ea quae* Lach. first for *ex quae*. *ex quo* vulg. without sense. *tanta vi missa* Flor. 31 Camb. 2 Vat. Pont. for *tantaumissa*. *tanta immissa* Nicc. Ver. *tanta vi immissa* Mar. Ald. 1 Junt. 321 *cursu si* Flor. 31 Camb. for *cursus*. 323 *Mobilitas* A corr. Camb. etc. for *Nobilitas*. 324 *Et* Mar. Nauger. for *At*. *Ac* Junt. Wak. *percurrunt* Lach. for *percunt*. *pergunt* A corr. Nicc. *iam per-*

colligit et magnum conamen sumit eundi,
inde ubi non potuit nubes capere inpetis auctum,
exprimitur vis atque ideo volat impete miro,
ut validis quae de tormentis missa feruntur.
adde quod e parvis et levibus est elementis,
nec facilest tali naturae opsistere quicquam ;
inter enim fugit ac penetrat per rara viarum,
non igitur multis offensibus in remorando
haesitat, hanc ob rem celeri volat impete labens.
deinde, quod omnino natura pondera deorsum
omnia nituntur, cum plagast addita vero,
mobilitas duplicatur et impetus ille gravescit,
ut vementius et citius quaecumque morantur
obvia discutiat plagis itinerque sequatur.
denique quod longo venit impete, sumere debet
mobilitatem etiam atque etiam, quae crescit eundo
et validas auget viris et roborat ictum.
nam facit ut quae sint illius semina cumque
e regione locum quasi in unum cuncta ferantur,
omnia coniciens in eum volventia cursum.
forsitan ex ipso veniens trahat aere quaedam
corpora quae plagis incendunt mobilitatem.
incolumisque venit per res atque integra transit
multa, foraminibus liquidus quia transvolat ignis.
multaque perfringit, cum corpora fulminis ipsa
corporibus rerum inciderunt, qua texta tenentur.
dissoluit porro facile aes aurumque repente
confervefacit, e parvis quia facta minute
corporibus vis est et levibus ex elementis,
quae facile insinuantur et insinuata repente
dissoluont nodos omnis et vincla relaxant.
autumnoque magis stellis fulgentibus apta

gunt Flor. 31 Camb. 2 Vat. *pergunt sic* Mar. Junt. Lamb. 335 *Deinde, quod*. *Adde quod* Lach. which seems to me much weaker than the ms. reading. 336 *plagast* Lach. for *plaga si*. *plaga sit* Flor. 31 Camb. all before Lach. 347 *incendunt* B rightly. *incedunt* A Nicc. *intendunt* Mar. Ald. 1 Junt. Lamb. etc. 349 *transvolat* Nauger. vulg. for *transviat*. *trameat* Gif. 350 *perfringit* Mar. Ald. 1 Junt. vulg. for *perfrigit* B, *perfigit* A, *perfregit* A corr. all later mss. Ver. Ven. : comp. 138 *perfringens* A corr. vulg. *perfingens* A, *perfrigens* B. Lach. keeps *perfigit*, which can hardly be right. 357 *apta* Turnebus Bentl. Wak. Lach. for

concutitur caeli domus undique totaque tellus,
et cum tempora se *veris* florentia pandunt.
frigore enim desunt ignes ventique calore
deficiunt neque sunt tam denso corpore nubes.
interutrasque igitur cum caeli tempora constant,
tum variae causae concurrunt fulminis omnes.
nam fretus ipse anni permiscet frigus *et* aestum,
quorum utrumque opus est fabricanda ad fulmina nubi,
ut discordia *sit* rerum magnoque tumultu
ignibus et ventis furibundus fluctuet aer.
prima caloris enim pars et postrema rigoris,
tempus id est vernum; quare pugnare necessest
dissimilis *res* inter se turbareque mixtas.
et calor extremus primo cum frigore mixtus
volvitur, autumni quod fertur nomine tempus,
hic quoque confligunt hiemes aestatibus acres.
propterea *freta* sunt haec anni nominitanda,
nec mirumst, in eo si tempore plurima fiunt
fulmina tempestasque cie*tur* turbida caelo,
ancipiti quoniam bello turbatur utrimque,
hinc flammis illinc ventis umoreque mixto.

Hoc est igniferi naturam fulminis ipsam
perspicere et qua vi faciat rem quamque videre,
non Tyrrhena retro volventem carmina frustra
indicia occultae divum perquirere mentis,
unde volans ignis pervenerit aut in utram se
verterit hinc partim, quo pacto per loca saepta
insinuarit, et hinc dominatus ut extulerit se,
quidve nocere queat de caelo fulminis ictus.

alta. 359 *se veris* Flor. 31 Camb. Mar. etc. for *seris.* *seris* (*veris*) Ver. Ven. 360 *calore* Mar. ap. Victor. in ed. Ven. Ald. 1 Junt. for *calores.* 362 *Interutrasque. Interutraque* Lach. 364 *et* added by Mar. Junt. *frigidus aestum* Nicc. to Avanc. *ad aestum* Nonius. 365 *nubi* Lach. for *nobis* which has no sense. 366 *sit* added by Mar. Ald. 1 Junt. *sic* Flor. 31 Camb. 368 *et, rigoris* Mar. Junt. vulg. for *est, ligoris.* Lach. keeps *est*, and for *id* reads *ut.* 370 *res inter se* Flor. 31 Camb. 3 Vat. for *inter se.* *inter se res* Ver. Ven. Mar. vulg. Lach. wrongly, as *inter se* is metrically one word. 374 *freta* added by Lach. most acutely. Flor. 31 Camb. Mar. vulg. add *bella* after *haec.* 375 *eo si* B corr. Lamb. for *eos.* *si in eo sic* Camb. Mar. *si in eo tum* Avanc. *si in eo iam* Pont. Junt. 376 *cietur turbida* B corr. Flor. 31 Camb. Brix. for *cic turbida.* 382 *mentis* Flor. 31 Camb. 2 Vat. Mar. for *menti.* 384 *hinc* Mar. Lach. for *hic*,

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terrifico quatiunt sonitu caelestia templa
et iaciunt ignem quo *quo*iquest cumque voluptas,
cur quibus incautum scelus aversabile cumquest
non faciunt icti flammas ut fulguris halent
pectore perfixo, documen mortalibus acre,
et potius nulla sibi turpi conscius in re
volvitur in flammis innoxius inque peditur
turbine caelesti subito correptus et igni?
cur etiam loca sola petunt frustraque laborant?
an tum bracchia consuescunt firmantque lacertos?
in terraque patris cur telum perpetiuntur
optundi? cur ipse sinit neque parcit in hostis?
denique cur numquam caelo iacit undique puro
Iuppiter *in terras* fulmen sonitusque profundit?
an simul ac nubes successere, ipse in eas tum
descendit, prope ut hinc teli determinet ictus?
in mare qua porro mittit ratione? quid undas
arguit et liquidam molem camposque natantis?
praeterea si vult caveamus fulminis ictum,
cur dubitat facere ut possimus cernere missum?
si nec opinantis autem volt opprimere igni,
cur tonat ex illa parte, ut vitare queamus,
cur tenebras ante et fremitus et murmura concit?
et simul in multas partis qui credere possis
mittere? an hoc ausis numquam contendere factum,
ut fierent ictus uno sub tempore plures?
at saepest numero factum fierique necessest,
ut pluere in multis regionibus et cadere imbris,
fulmina sic uno fieri sub tempore multa.
postremo cur sancta deum delubra suasque
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et bene facta deum frangit simulacra suisque
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altaque cur plerumque petit loca plurimaque eius
montibus in summis vestigia cernimus ignis?
Quod superest, facilest ex his cognoscere rebus,
presteras Grai quos ab re nominitarunt,
in mare qua missi veniant ratione superne.
nam fit ut interdum tamquam demissa columna
in mare de caelo descendat, quam freta circum
fervescunt graviter spirantibus incita flabris,
et quaecumque in eo tum sint deprensa tumultu
navigia in summum veniant vexata periclum.
hoc fit ubi interdum non quit vis incita venti
rumpere quam coepit nubem, sed deprimit, ut sit
in mare de caelo tamquam demissa columna,
paulatim, quasi quid pugno bracchique superne
coniectu trudatur et extendatur in undas;
quam cum discidit, hinc prorumpitur in mare venti
vis et fervorem mirum concinnat in undis;
versabundus enim turbo descendit et illam
deducit pariter lento cum corpore nubem;
quam simul ac gravidam detrusit ad aequora ponti,
ille in aquam subito totum se inmittit et omne
excitat ingenti sonitu mare fervere cogens.
fit quoque ut involvat venti se nubibus ipse
vertex conradens ex aere semina nubis
et quasi demissum caelo prestera imitetur.
hic ubi se in terras demisit dissoluitque,
turbinis inmanem vim provomit atque procellae.
sed quia fit raro omnino montisque necessest
officere in terris, apparet crebrius idem
prospectu maris in magno caeloque patenti.
Nubila concrescunt, ubi corpora multa volando

saevi ut Mar. Junt. 421 *loca* B corr. Flor. 31 Camb. Mon. Ver. Ven. for *ioca*. *que eius* Lach. for *que plus*. *que huius* Lamb. 424 *Grai* Flor. 31 Camb. Brix. for *Grali*. *Graii* B corr. Mar. *Graiei* Lach.: Lucretius wrote either *Graiei* or *Grai*, not *Graii*. 426 *tamquam* Flor. 31 Camb. Ver. Ven. Mar. for *tam cum*.
428 *incita* Flor. 31 Camb. Mar. etc. for *lacita*. 430 *veniant* Lach. for *veniunt*: Flor. 31 Mar. Junt. Lamb. vulg. keep *veniunt*, and 429 read *sunt*. 440 *detrusit* Lamb. first for *detruit*. *detrudit* A corr. Nicc. 447 *procellae* Flor. 31 Vat. 640 Urbin. Vat. 1136 Othob. Mar. for *procellat* which Wak. absurdly retains. 449 *Officere* Flor. 31 Camb. Mon. for *Officeret*. 452 *supero* Lach. for *super*. *supera*

hoc supero in caeli spatio coiere repente
asperiora, moris quae possint indupedita
exiguis tamen inter se comprensa teneri.
haec faciunt primum parvas consistere nubes;
inde haec comprendunt inter se conque gregantur
et coniungendo crescunt ventisque feruntur
usque adeo donec tempestas saeva coortast.
fit quoque uti montis vicina cacumina caelo
quam sint quoque magis, tanto magis edita fument
adsidue furvae nubis caligine crassa
propterea quia, cum consistunt nubila primum,
ante videre oculi quam possint, tenvia, venti
portantes cogunt ad summa cacumina montis.
hic demum fit uti turba maiore coorta
et condensa queant apparere et simul ipso
vertice de montis videantur surgere in aethram.
nam loca declarat sursum ventosa patere
res ipsa et sensus, montis cum ascendimus altos.
praeterea permulta mari quoque tollere toto
corpora naturam declarant litore vestes
suspensae, cum concipiunt umoris adhaesum.
quo magis ad nubis augendas multa videntur
posse quoque e salso consurgere momine ponti;
nam ratio consanguineast umoribus ollis.
praeterea fluviis ex omnibus et simul ipsa

Lamb. conj. *coiere* Flor. 31 Camb. Brix. Mar. for *coire*. 453 *moris* Lach. for *modis*: a certain correction. 454 *comprensa* Mar. Lamb. for *compressa*. 456 *haec* Lach. for *ea*: *ea* might possibly be defended by 188, and 215 *eas*: see notes 2 there: but the harshness would be very great. 460 *quoque*. *quaeque* Camb. 2 Vat. Ald. 1 Mar. Junt. Lamb. etc. wrongly. 461 *furvae* Bentl. Lach. for *fulvae*. *nubis* Mar. Ald. 1 Junt. for *nubes*. 465 *turba maiore* Pont. Mar. Ald. 1 Junt. for *turbammor*. *turba minore* Flor. 31 Camb. 466 *Et condensa queant apparere* Lach. most acutely for *Et condensatque arta parere*. *Et condensa atque arta* Flor. 31, 3 Vat. Pont. Mar. Avanc. at end of Catullus. 467 *videantur* Flor. 31 Camb. Vat. 640 Urbin. 1136 Othob. Lamb. for *videatur*. 468 *loca* Flor. 31 Camb. Mar. Junt. for *lo*. *so* Nicc. *se* Brix. Ver. Ven. Ald. 1. 469 *et sensus* Avanc. for *et sensum*: Mar. Junt. Nauger. have *ad sensum*. 473 *Quo magis* Mon. Ald. 1 Junt. for *Quod magis*. 474 *consurgere momine* Flor. 31 Camb. Vat. 1136 and 1954 Othob. Mar. for *consurgerem homine*. 475 *consanguineast* Is. Voss. in ms. notes for *consanguinea se*. *cum sanguine ob eumoribus* Nicc. *cum sanguine abest* Flor. 31 Camb. 4 Vat. Lamb. *ollis* Lach. for *omnis*. Avanc. at end of Catullus says 'non percipio illum mancum versum *Nam ratio cum*

surgere de terra nebulas aestumque videmus,
quae velut halitus hinc ita sursum expressa feruntur
suffunduntque sua caelum caligine et altas
sufficiunt nubis paulatim conveniundo;
urget enim quoque signiferi super aetheris aestus
et quasi densendo subtexit caerula nimbis.
fit quoque ut huc veniant in caelum extrinsecus illa
corpora quae faciunt nubis nimbosque volantis;
innumerabilem enim numerum summamque profundi
esse infinitam docui, quantaque volarent
corpora mobilitate ostendi quamque repente
inmemorabile per spatium transire solerent.
haut igitur mirumst si parvo tempore saepe
montibu' tam magnis tempestas atque tenebrae
coperiunt maria ac terras inpensa superne,
undique quandoquidem per caulas aetheris omnis
et quasi per magni circum spiracula mundi
exitus introitusque elementis redditus extat.

Nunc age, quo pacto pluvius concrescat in altis
nubibus umor et in terras demissus ut imber
decidat, expediam. primum iam semina aquai
multa simul vincam consurgere nubibus ipsis
omnibus ex rebus pariterque ita crescere utrumque
et nubis et aquam quaecumque in nubibus extat,
ut pariter nobis corpus cum sanguine crescit,
sudor item atque umor quicumque est denique membris.
concipiunt etiam multum quoque saepe marinum
umorem, veluti pendentia vellera lanae,
cum supera magnum mare venti nubila portant.

sanguine ab humoribus omnis': which he found in Ven. 483 *huc* Vat. 3276 Avanc. for *hunc*. *hinc* Flor. 31 Camb. 2 Vat. Mon. *hunc coetum* Mar. Junt. Lamb. vulg. *illa* Flor. 31 Camb. Vat. 640 Urbin. Mar. for *illi* A, *ille* B. 488 *per* added by Pont. Mar. Junt. 490 *Montibu' tam magnis* Ed. for *Tam magnis montis*: *Tam magnis montib.* was the first corruption: see 189 and IV 140. *Tam magnis nimbis* Lach. *Tam magnae molis* Bern. *Tam magnos montis* Pont. Mar. Ald. 1 Junt. vulg. 491 *Coperiunt* Lach. rightly for *Coperiant*. [I now think it probable that Lucr. wrote *coperiant* as given by the mss: compare Cic. Laelius 29 *quid mirum est si animi hominum moveantur?* see Mueller ap. Seyffert p. 206: so here Lucr. seems to realise a special case before his eyes.] 492 *caulas* Mar. Ald. 1 Junt. for *cavias*. 496 *demissus* Flor. 31 Mon. Lamb. for *dimissus*.

498 *vincam* Flor. 31 Camb. Mon. Ver. Ven. for *vineam*. 503 *Concipiunt*

consimili ratione ex omnibus amnibus umor
tollitur in nubis. quo cum bene semina aquarum
multa modis multis convenere undique adaucta,
confertae nubes *umorem* mittere certant
dupliciter; nam vis venti contrudit et ipsa
copia nimborum turba maiore coacta
urget, de supero premit ac facit effluere imbris.
praeterea cum rarescunt quoque nubila ventis
aut dissolvuntur, solis super icta calore,
mittunt umorem pluvium stillantque, quasi igni
cera super calido tabescens multa liquescat.
sed vemens imber fit, ubi vementer utraque
nubila vi cumulata premuntur et impete venti.
atque tenere diu pluviae longumque morari
consuerunt, ubi multa cientur semina aquarum
atque aliis aliae nubes nimbique rigantes
insuper atque omni vulgo de parte feruntur,
terraque cum fumans umorem tota redhalat.
hic ubi sol radiis tempestatem inter opacam
adversa fulsit nimborum aspargine contra,
tum color in nigris existit nubibus arqui.

Cetera quae sorsum crescunt sorsumque creantur,
et quae concrescunt in nubibus, omnia, prorsum
omnia, nix venti grando gelidaeque pruinae
et vis magna geli, magnum duramen aquarum,
et mora quae fluvios passim refrenat euntis,

Brix. Pont. Mar. for *Concidiunt*. 509 *umorem* Ed. for *vi venti* which as Creech has seen comes from the *vis venti* of 510: he proposes *imbres tum*: what Lucr. wrote must be quite uncertain. *umentia* Lach. after a conj. of Wak. 511 *turba maiore* Mar. Ald. 1 Junt. for *turbam more*: the same error as in 465. *minore* Flor. 31 Camb. 3 Vat. 512 *Urget de supero* Lach. for *Urgete supero*. *Urget et e supero* A corr. Nicc. vulg. 515 *stillantque* B corr. Lamb. for *stillante*.

516 *Cera* Flor. 31 Pont. Mar. Ald. 1 Junt. for *Tela*. *Teda* B corr. 518 *vi. aquis* Lach. thereby ruining the sense. 519 *Atque tenere* Lach. for *At retineret*. *At remanere* Bern. 520 *cientur* Lach. from a conj. of Wak., for *fientur*. *fluentur* Flor. 31 Camb. Wak. *fuerunt* Mar. Ald. 1 Junt. 523 *umorem*. *humorem* AB: often as this and cognate words occur, this is the only instance where B has the aspirate: A has it in three other places: II 1114 *Umor ad humorem* A. *redhalat* Is. Voss. in ms. notes for *redralat*: he also proposes *relatrat* 'i.e. reposcit'. *rehalat* A corr. vulg. 524 *inter* Nicc. for *inte* B, *ime* A.

527 *sorsum...sorsumque* Koch in Rhein. mus. n. f. VIII p. 640 for *sursum...sursumque*. *cursu...cursuque* Lach. 531 *euntis* B corr. Pont. Avanc. for *avintis*. *aventis*

perfacilest tamen haec reperire animoque videre
omnia quo pacto fiant quareve creentur,
cum bene cognoris elementis reddita quae sint.
Nunc age quae ratio terrai motibus extet
percipe. et in primis terram fac ut esse rearis
supter item ut supera ventosis undique plenam
speluncis multosque lacus multasque lucunas
in gremio gerere et rupes deruptaque saxa;
multaque sub tergo terrai flumina tecta
volvere vi fluctus summersaque saxa putandumst;
undique enim similem esse sui res postulat ipsa.
his igitur rebus subiunctis suppositisque
terra superne tremit magnis concussa ruinis,
subter ubi ingentis speluncas subruit aetas;
quippe cadunt toti montes magnoque repente
concussu late disserpunt inde tremores.
et merito, quoniam plaustri concussa tremescunt
tecta viam propter non magno pondere tota,
nec minus exultant, ut scrupus cumque viai
ferratos utrimque rotarum succutit orbes.
fit quoque, ubi in magnas aqüae vastasque lucunas
gleba vetustate e terra provolvitur ingens,
ut iactetur aquae fluctu quoque terra vacillans;

A corr. *aquantis* Flor. 31 Mar. Junt. 533 *fiant* Mar. Ald. 1 Junt. for *fluant*. 536 *terram* Flor. 31 Camb. etc. for *terras*. 537 *supera* Avanc. for *super*. *supra est* Mar. Junt. *supera'st* Lamb. etc. *ventosis* Wak. for *ventis*, 'egregie' says Lach. justly. 541 *summersaque saxa* Flor. 31 Camb. 3 Vat. Mar. vulg. for *summersosca*. '*summerso capte* i.e. capite. sic Enn. *Capitibus nutantes pinus*' Is. Voss. in ms. notes. 542 *similem* Junt. first for *simile*. *esse sui* Ald. 1 Junt. for *esse vi*. *simile esse et par* Mar. 548 *plaustri* Lach. for *plaustris*. 550 *exultant, ut scrupus cumque viai* Ed. for *exultantes dupuis cumque vim*: see notes 2: Lach. rightly saw that *vim* meant *viai*: so 465 and 511 the mss. have *mmore* for *maiore*; but the rest of his reading *et ubi lapi' cumque* seems to me to pervert the meaning, as Lucr. is giving two distinct instances of great results from small causes; and it would be a really monstrous exaggeration to say that houses shake in the way a carriage does, when the wheels are struck up by a stone on the road. *ubi currus cumque equum vi* Flor. 31 Camb. and 3 Vat.: but Camb. in text and Vat. 1136 Othob. in marg. have also the ms. reading. *ubi currus cunque equitum vi* Mar. Junt. Lamb. ed. 1. *ubi currus fortis equum vis* ed. 2 and 3, the *fortis equum vis* being from Avanc. *aedes, ubi cumque equitum vis* Wak. *sola Pisaeumque flumen* Is. Voss. in ms. notes: he adds *cum* after *Ferratos*. 552 *in magnas aqüae*. *magnas in aquae* Lamb. vulg. before Lach. 554 *vacillans* B corr. Avanc. for *vacillas*.

ut vas inter*dum* non quit constare, nisi umor
destitit in dubio fluctu iactarier intus.
Praeterea ventus cum per loca subcava terrae
collectus parte ex una procumbit et urget
obnixus magnis speluncas viribus altas,
incumbit tellus quo venti prona premit vis.
tum supera terram quae sunt extructa domorum
ad caelumque magis quanto sunt edita quaeque,
inclinata *tu*ment in eandem prodita partem
protractaeque trabes inpendent ire paratae.
et metuunt magni naturam credere mundi
exitiale aliquod tempus clademque manere,
cum videant tantam terrarum incumbere molem!
quod nisi respirent venti, vis nulla refrenet
res neque ab exitio possit reprehendere euntis.
nunc quia respirant alternis inque gravescunt
et quasi collecti redeunt ceduntque repulsi,
saepius hanc ob rem minitatur terra ruinas
quam facit; inclinatur enim retroque recellit
et recipit prolapsa suas in pondere sedes.
hac igitur ratione vacillant omnia tecta,
summa magis mediis, media imis, ima perhilum.
Est haec eiusdem quoque magni causa tremoris,
ventus ubi atque animae subito vis maxima quaedam
aut extrinsecus aut ipsa tellure coorta
in loca se cava terrai coniecit ibique
speluncas inter magnas fremit ante tumultu
versabunda*que* portatur, post incita cum vis

555 *inter dum* Lach. for *inter*. *in terra* Mar. Ald. 1 Junt. vulg. perhaps rightly. 563 *Inclinata tument* Ed. with Vat. 3276 for *Inclinata minent*: the *tu* was absorbed by the preceding *ta* and then *ment* passed into *minent*: the Verona palimpsest of Lucan v 160 has *consultamultu* for *consulta tumultu*: comp. 1195 *tenta mebat* of mss. for *tenta tumebat*, and v 1409 *servare genus* for *servare recens*. *Inclinata meant* Lach. *abeunt* Bern. *minant* Flor. 31 Camb. Mar. Ald. 1 Junt.: see Prisc. inst. VIII 29: I wrongly read *minantur* in small ed. *micant* Pius in text. Lamb. retains *minent*. At the end of this verse A and Nicc. have a. a. q. q. B has *aqueq*. which Bern. praef. p. III thinks a mere repetition of the end of 562, A introducing a further corruption: but Nicc. proves that the archetype agreed with A, not B. 568 *venti, vis nulla* Mar. Wak. for *ventis nulla*. 574 *in pondere* A Nicc. vulg. rightly. *in pondera* B Turneb. Lach. The passages I quote in notes 2 will prove that Turneb. and Lach. are quite mistaken in supposing that the sing.

exagitata foras erumpitur et simul altam
diffindens terram magnum concinnat hiatum.
in Syria Sidone quod accidit et fuit Aegi
in Peloponneso, quas exitus hic animai
disturbat urbes et terrae motus obortus.
multaque praeterea ceciderunt moenia magnis
motibus in terris et multae per mare pessum
subsedere suis pariter cum civibus urbes.
quod nisi prorumpit, tamen impetus ipse animai
et fera vis venti per crebra foramina terrae
dispertitur ut horror et incutit inde tremorem;
frigus uti nostros penitus cum venit in artus,
concutit invitos cogens tremere atque movere.
ancipiti trepidant igitur terrore per urbis,
tecta superne timent, metuunt inferne cavernas
terrai ne dissoluat natura repente,
neu distracta suum late dispandat hiatum
adque suis confusa velit complere ruinis.
proinde licet quamvis caelum terramque reantur
incorrupta fore aeternae mandata saluti;
et tamen interdum praesens vis ipsa pericli
subdit et hunc stimulum quadam de parte timoris,
ne pedibus raptim tellus subtracta feratur
in barathrum rerumque sequatur prodita summa
funditus et fiat mundi confusa ruina.

[Principio mare mirantur non reddere maius
naturam, quo sit tantus decursus aquarum,
omnia quo veniant ex omni flumina parte.
adde vagos imbris tempestatesque volantes,
omnia quae maria ac terras sparguntque rigantque;
adde suos fontis; tamen ad maris omnia summam

cannot be used in the same sense as the plur. 582 *que* added by Flor. 31 Camb. Pont. etc. 585 *Syria. Tyria* Lamb. etc. without cause. 586 *quas* Avanc. for *qua.* 588 *ceciderunt* Mon. Ver. Ven. for *cecideret. cecidere et* Flor. 31 Camb. 589 *pessum* Nicc. B corr. for *possum.* 600 *Adque* Lach. for *Idque. Imque* Lamb. in the additions to ed. 3. 604 *Subdit et hunc* A Flor. 31 Camb. etc. *Subdita et hunc* BA corr. Nicc. *Subdit athuc* Lach. *Subditat hunc* Mar. Junt. Lamb. etc. 605 *subtracta* Nicc. for *substructa.* 608—638 are proved by Lach. to be quite unconnected with what precedes or follows. Mar. Junt. vulg. prefix this verse *Nunc ratio reddenda augmen cur nesciat aequor.* 609

guttai vix instar erunt unius adaugmen;
quo minus est mirum mare non augescere magnum.
praeterea magnam sol partem detrahit aestu.
quippe videmus enim vestis umore madentis
exsiccare suis radiis ardentibu' solem:
at pelage multa et late substrata videmus.
proinde licet quamvis ex uno quoque loco sol
umoris parvam delibet ab aequore partem;
largiter in tanto spatio tamen auferet undis.
tum porro venti quoque magnam tollere partem
umoris possunt verrentes aequora, ventis
una nocte vias quoniam persaepe videmus
siccari mollisque luti concrescere crustas.
praeterea docui multum quoque tollere nubes
umorem magno conceptum ex aequore ponti
et passim toto terrarum spargere in orbi,
cum pluit in terris et venti nubila portant.
postremo quoniam raro cum corpore tellus
est, et coniunctast, oras maris undique cingens,
debet, ut in mare de terris venit umor aquai,
in terras itidem manare ex aequore salso;
percolatur enim virus retroque remanat
materies umoris et ad caput amnibus omnis
confluit, inde super terras redit agmine dulci
qua via secta semel liquido pede *de*tulit undas.]

Nunc ratio quae sit, per fauces montis ut Aetnae
expirent ignes interdum turbine tanto,
expediam. neque enim mediocri clade coorta
flammea tempestas Siculum dominata per agros
finitimis ad se convertit gentibus ora,

Naturam Pont. Mar. Ald. 1 Junt. first for *Natura.* 614 *adaugmen. ad augmen* Nicc. followed by all mss. and eds. before Lach. 616 *magnam sol* Pont. Junt. for *sol magnam. magnam partem sol* Mar. 624 *aequora, ventis* Lach. for *aequora venti. aequora ponti* Nicc. vulg. perhaps rightly, as the words are often confused: comp. I 276: and *ventis* is somewhat awkward. 629 *orbi* Mar. Junt. for *orbis. orbe* Flor. 31 Camb. Avanc. 632 *maris* B corr. Pont. Mar. Junt. (not Flor. 31) for *magis.* 638 *pede detulit* A corr. for *pede tulit.* 641 *mediocri clade coorta* Is. Voss. in ms. notes for *media grecia de coorta*: a fine and certain correction. *media de glade* Vat. 1954 Othob. *media de clade* two Vat. Pius in notes, Nauger. Lamb. *media quae clade* Avanc. *dia de clade* Fab. *Enceladi de clade* Bentl. before he knew Vossius' emendation. 642 *Flammea* Heins. in

fumida cum caeli scintillare omnia templa
cernentes pavida complebant pectora cura,
quid moliretur rerum natura novarum.
  Hisce tibi in rebus latest alteque videndum
et longe cunctas in partis dispiciendum,
ut reminiscaris summam rerum esse profundam
et videas caelum summai totius unum
quam sit parvula pars et quam multesima constet,
nec tota pars, homo terrai quota totius unus.
quod bene propositum si plane contueare
ac videas plane, mirari multa relinquas.
numquis enim nostrum miratur siquis in artus
accepit calido febrim fervore coortam
aut alium quemvis morbi per membra dolorem?
opturgescit enim subito pes, arripit acer
saepe dolor dentes, oculos invadit in ipsos,
existit sacer ignis et urit corpore serpens
quamcumque arripuit partim, repitque per artus,
nimirum quia sunt multarum semina rerum,
et satis haec tellus nobis caelumque mali fert,
unde queat vis immensi procrescere morbi.
sic igitur toti caelo terraeque putandumst
ex infinito satis omnia suppeditare,
unde repente queat tellus concussa moveri
perque mare ac terras rapidus percurrere turbo,
ignis abundare Aetnaeus, flammescere caelum;
id quoque enim fit et ardescunt caelestia templa,
et tempestates pluviae graviore coortu
sunt, ubi forte ita se tetulerunt semina aquarum.
'at nimis est ingens incendi turbidus ardor.'
scilicet et fluvius quivis est maximus ei
qui non ante aliquem maiorem vidit, et ingens
arbor homoque videtur, et omnia de genere omni

ms. notes for *Flammae*. 648 *dispiciendum* Nicc. for *despiciendum*. 652 corrupted by Mar. Junt. Lamb. etc. 653 *propositum* B corr. Ver. Ven. Mar. for *propositus*. *propositum est* Flor. 31 Camb. *plane* B corr. Flor. 31 Camb. Mon. for *plani*. 663 *nobis* Mar. Junt. Lamb. etc. for *morbi* which has come from 664. *orbi* Lach. 674 *quivis est* Bentl. for *qui visus*. *quivis ut* Heins. in ms. notes, and Is. Voss. in ms. notes. *qui non est* Lamb. *est* is added after *ei* by Flor.

maxima quae vidit quisque, haec ingentia fingit,
cum tamen omnia cum caelo terraque marique
nil sint ad summam summai totius omnem.
  Nunc tamen illa modis quibus inritata repente
flamma foras vastis Aetnae fornacibus efflet,
expediam. primum totius subcava montis
est natura, fere silicum suffulta cavernis.
omnibus est porro in speluncis ventus et aer;
ventus enim fit, ubi est agitando percitus aer.
hic ubi percaluit calefecitque omnia circum
saxa furens, qua contingit, terramque, et ab ollis
excussit calidum flammis velocibus ignem,
tollit se ac rectis ita faucibus eicit alte.
fert itaque ardorem longe longeque favillam
differt et crassa volvit caligine fumum
extruditque simul mirando pondere saxa;
ne dubites quin haec animai turbida sit vis.
praeterea magna ex parti mare montis ad eius
radices frangit fluctus aestumque resorbet.
ex hoc usque mari speluncae montis ad altas
perveniunt subter fauces. hac ire fatendumst
. . . .
et penetrare mari penitus res cogit aperto
atque efflare foras ideoque extollere flammam
saxaque subiectare et arenae tollere nimbos.
in summo sunt vertice enim crateres, ut ipsi
nominitant; nos quod fauces perhibemus et ora.
  Sunt aliquot quoque res quarum unam dicere causam
non satis est, verum pluris, unde una tamen sit;

31 Camb. one Vat. Lamb. 683 *fere silicum* A corr. Flor. 31 Camb. for *feres illi cum*. 687 *contingit* Flor. 31 Brix. Mar. for *contigit*. 690 *Fert itaque* Heins. in ms. notes and Lach. for *Fert itque*. *Fecitque* Nicc. *Vertitque* Is. Voss. in ms. notes. 695 *resorbet* Flor. 31 Camb. 3 Vat. Mar. for *resolvet*: a fine correction. 697 see Camb. Journ. of phil. I p. 40, where I said that at least one verse is here lost: in the smaller ed. I proposed a verse such as this, *Fluctibus admixtam vim venti; intrareque ab isto*: which will serve to shew the general meaning. Lach. violently reads *penitus percocta in apertum* for *penitus res cogit aperto*. 701 *vertice enim* Turneb. advers. XXII 19, Is. Voss. in ms. notes, Bentl. for *verticeni*. Turneb. also proposes and seems to prefer *vertigeni* which Lamb. ed. 3 adopts from him. *vertice item* Mar. Ald. 1 Junt. 702 *quod*. *quas* Pont.

corpus ut exanimum siquod procul ipse iacere
conspicias hominis, fit ut omnis dicere causas
conveniat leti, dicatur ut illius una.
nam neque eum ferro nec frigore vincere possis
interiisse neque a morbo neque forte veneno,
verum aliquid genere esse ex hoc quod contigit ei
scimus. item in multis hoc rebus dicere habemus.

Nilus in aestatem crescit campisque redundat,
unicus in terris Aegypti totius amnis.
is rigat Aegyptum medium per saepe calorem,
aut quia sunt aestate aquilones ostia contra,
anni tempore eo qui etesiae esse feruntur,
et contra fluvium flantes remorantur et undas
cogentes sursus replent coguntque manere.
nam dubio procul haec adverso flabra feruntur
flumine, quae gelidis ab stellis axis aguntur.
ille ex aestifera parti venit amnis ab austro,
inter nigra virum percocto saecla colore
exoriens penitus media ab regione diei.
est quoque uti possit magnus congestus harenae
fluctibus adversis oppilare ostia contra,
cum mare permotum ventis ruit intus harenam;
quo fit uti pacto liber minus exitus amni
et proclivis item fiat minus impetus undis.
fit quoque uti pluviae forsan magis ad caput ei
tempore eo fiant, quod etesia flabra aquilonum
nubila coniciunt in eas tunc omnia partis.
scilicet ad mediam regionem eiecta diei
cum convenerunt, ibi ad altos denique montis
contrusae nubes coguntur vique premuntur.
forsitan Aethiopum penitus de montibus altis

Mar. Junt. Lamb. etc. wrongly: see Lach. III 94. 705 *iacere* Flor. 31 Camb. Brix. Mar. for *iaceret*. 708 *nam neque* Flor. 31 Camb. Mar. for *namque*.

710 *Verum* Mar. Ald. 1 Junt. for *Utrum*. *contigit ei* (*eii*) Is. Voss. in ms. notes for *contioitel* A, *contioite* B, *contioites* Nicc. two Vat.: a certain correction. *concio dicat* Flor. 31 two Vat. Ald. 1 Lamb. ed. 1 and 3. *concio credat* Camb. one Vat. Mon. Junt. Lamb. ed. 2. 719 *flabra* Flor. 31 Camb. Ver. Ven. for *flabro*.

727 *amni* Mar. Junt. for *amnis*. 729 *ei* AB Nicc. all Vat. Brix. Ver. Ven. *eius* Flor. 31 Camb. Pont. Mar. Ald. 1 Junt. vulg. before Lach. 730 *quod* Mar. Junt. rightly for *quo*, as *tunc* follows; but as Junt. writes it compendiously, no one before

crescat, ubi in campos albas descendere ningues
tabificis subigit radiis sol omnia lustrans.

Nunc age, Averna tibi quae sint loca cumque lacusque
expediam, quali natura praedita constent.
principio quod Averna vocantur nomine, id ab re
inpositumst, quia sunt avibus contraria cunctis,
e regione ea quod loca cum venere volantes,
remigi oblitae pennarum vela remittunt
praecipitesque cadunt molli cervice profusae
in terram, si forte ita fert natura locorum,
aut in aquam, si forte lacus substratus Avernist.
is locus est Cumas aput, acri sulpure montes
oppleti calidis ubi fumant fontibus aucti.
est et Athenaeis in moenibus, arcis in ipso
vertice, Palladis ad templum Tritonidis almae,
quo numquam pennis appellunt corpora raucae
cornices, non cum fumant altaria donis:
usque adeo fugitant non iras Palladis acris
pervigili causa, Graium ut cecinere poetae,
sed natura loci ope sufficit ipsa suapte.
in Syria quoque fertur item locus esse videri,
quadripedes quoque quo simul ac vestigia primum
intulerint, graviter vis cogat concidere ipsa,
manibus ut si sint divis mactata repente.
omnia quae naturali ratione geruntur,

Lach. adopted it. 736 *descendere* Lamb. for *decedere*. 740 *quod*. *quo* Lach.: I now think him wrong. *quod...*, *nomen id* Flor. 31 Mar. Ald. 1 Junt. vulg. before Wak. *nomen aornis* Gervas. Tilleberiensis: see Lach. 743 *Remigii* Mar. Junt., *Remigi oblitae* Lach. for *Remigio oblitae*. 746 *substratus* Brix. Avanc. Nauger., *subiratus* (*substratus*) Ver. Ven. for *subiratus*. *Avernist* Ed., *Averno'st* Lamb., for *Averni*. Lach. inserts *est* before *si forte*; but the passage he quotes in support is not more in point than the one he cites in favour of *aut sex* in IV 303 (327), the metre there ruling the order of the words. 747 *Is* B. *His* A Nicc. *acri sulpure* Salmas. Heins. in ms. notes, Is. Voss. in ms. notes, Bentl. for *ecri suiper*: the readings of older editors are too absurd to mention. *montes* B, *montis* A Nicc. which is probably what Lucr. wrote. For *montes...aucti* Heins. suggests *olentes...agri*. 749 *Est et*. *Est ut* Lach. intolerant of *et* for *etiam*. 755 *ope sufficit* Ed. for *opus efficit*: a transposition of only two letters: comp. III 374. *vi ibus officit* Lach.: a harsh and inadmissible elision: see L. Mueller de re metr. p. 284. *loci hoc opus* Avanc. Lamb. *suapte*. *sua vi* Lamb. 759 *si sint divis mactata*. *si fit divis mactatu'* Lach.: an awkward and uncalled-for change: see IV 934. *fit* seems hardly Latin, the

et quibus effiant causis apparet origo;
ianua ne forte his Orci regionibus esse
credatur, post hinc animas Acheruntis in oras
ducere forte deos manis inferne reamur,
naribus alipedes ut cervi saepe putantur
ducere de latebris serpentia saecla ferarum.
quod procul a vera quam sit ratione repulsum
percipe; nam de re nunc ipsa dicere conor.
  Principio hoc dico, quod dixi saepe quoque ante,
in terra cuiusque modi rerum esse figuras;
multa, cibo quae sunt, vitalia, multaque, morbos
incutere et mortem quae possint adcelerare.
et magis esse aliis alias animantibus aptas
res ad vitai rationem ostendimus ante
propter dissimilem naturam dissimilisque
texturas inter sese primasque figuras.
multa meant inimica per auris, multa per ipsas
insinuant naris infesta atque aspera iactu,
nec sunt multa parum tactu vitanda neque autem
aspectu fugienda saporeque tristia quae sint.
  Deinde videre licet quam multae sint homini res
acriter infesto sensu spurcaeque gravesque;
arboribus primum certis gravis umbra tributa
usque adeo, capitis faciant ut saepe dolores,
siquis eas supter iacuit prostratus in herbis.
est etiam magnis Heliconis montibus arbos

structure of the sentence calling for a subjunctive. 761 *effiant causis* Lach. for *e fiant causis*: perhaps *ecfiant*. *e causis fiant* Flor. 31 Camb. 3 Vat. Mar. vulg. rightly perhaps. 762 *ne forte his* Ed. for *ne poteis*. *ne potis* A corr. Nicc.: perhaps *is* should be retained. *puteis* Turneb. *Puteis* Lach. i. e. Puteolanis: a quite unexampled form, and not I think suited to the context. *ne potius* Flor. 31 Camb. 2 Vat. Mar. etc.: hence Lamb. *ne his Orci potius*. *ne posita hiis* Wak.

763 *post hinc*. *posta, hinc* Mar. Junt. Lamb. etc. 764 *inferne* Lamb. for *inferna*. 768 *nam de re nunc ipsa* B. *de re* om. A: hence omitted or transposed in later mss. *namque ipsa de re* vulg. 771 *cibo quae sunt* Wak. first for *cibo eque sunt*. *homini quae sunt* Lamb. etc. 777 *auris* Mar. (acc. to Victor. but not in ms.) Ald. 1 Junt. for *auras*. 778 *aspera iactu* Ed. for *aspera tactu*: *iacere, adiectus* are specially said of smell, as II 846 IV 673: comp. also II 1047. Bentl. defends *tactu*, perhaps rightly. *aspera adactu* Lach.: but *adactu* implies a violent thrust or effort, as of a weapon, a tooth. *odore* Lamb. ed. 2 and 3.

780 *tristia* Flor. 31 Camb. Mon. Ver. Ven. for *tristitia*. 788 *ideo terris* Mar.

floris odore hominem taetro consueta necare.
scilicet haec ideo terris ex omnia surgunt,
multa modis multis multarum semina rerum
quod permixta gerit tellus discretaque tradit.
nocturnumque recens extinctum lumen ubi acri
nidore offendit nares, consopit ibidem,
concidere et spumas qui morbo mittere suevit.
castoreoque gravi mulier sopita recumbit
et manibus nitidum teneris opus effluit ei,
tempore eo si odoratast quo menstrua solvit.
multaque praeterea languentia membra per artus
solvunt atque animam labefactant sedibus intus.
denique si calidis etiam cunctare lavabris
plenior et laveris, solio ferventis aquai
quam facile in medio fit uti des saepe ruinas!
carbonumque gravis vis atque odor insinuatur
quam facile in cerebrum, nisi aquam praecepimus ante!
at cum membra domus percepit fervidu', nervis
tum fit odor viri plagae mactabilis instar.
nonne vides etiam terra quoque sulpur in ipsa
gignier et taetro concrescere odore bitumen;
denique ubi argenti venas aurique secuntur,
terrai penitus scrutantes abdita ferro,
qualis expiret Scaptensula subter odores?
quidve mali fit ut exhalent aurata metalla!
quas hominum reddunt facies qualisque colores!

Ald. 1 Junt. for *indeo tris*. 789 is rightly joined by Camb. Lamb. Gif. Wak. with 790. Creech Lach. etc. connect it with 788. 791 *acri* Lamb. ed. 2 first for *acris*. 793 *et spumas* Madvig in Henrichsen de fragm. Gottorp. p. 37 for *et pumos*: *spumas* Lamb. found in marg. of cod. Memmian. Lach. puts this verse after 801 and reads *et spumam ut* perversely: older corrections are unworthy of notice. 798 *labefactant* Flor. 31 Camb. Mar. Ver. Ven. for *labefaciant*.

799 *cunctare* Lach. for *cunctere*. 800 *et laveris, solio* Lach. for *efflueris solio*. *et frueris solio* Madv. l. l.: the passage is very doubtful. 803 *aquam* Flor. 31 Camb. Pont. Mar. Junt. for *aqua*. 804 *membra domus* Vat. 3276 Brix. Pius in notes, Gronov. Lach. for *membra domnus*. *domin'* Nicc. *dominus* Ver. Ven. Nauger. *donus* Flor. 31 Camb. two Vat. *membra domans* Mar. Junt. Is. Voss. in ms. notes, Madv. l. l. *membra hominis* Lamb. *fervidu', nervis* Ed. (*fervida, nervis* Wak.): the *n* of *nervis* was written over the line and wrongly attached to *domus*: hence *domnus*. *fervidior vis* Lach. for *fervida servis* A Nicc. *fervida fervis* B: *fervida febris* Lamb. Is. Voss. in ms. notes, Madv. 805 *viri* Pius in notes, Lach. for *vini*.

806 *ipsa* Flor. 31 Camb. Pont. for *ipso*. 808 *argenti* Flor. 31 Camb. Mon.

nonne vides audisve perire in tempore parvo
quam soleant et quam vitai copia desit,
quos opere in tali cohibet vis magna necessis?
hos igitur tellus omnis exaestuat aestus
expiratque foras in apertum promptaque caeli.
Sic et Averna loca alitibus summittere debent
mortiferam vim, de terra quae surgit in auras,
ut spatium caeli quadam de parte venenet;
quo simul ac primum pennis delata sit ales,
impediatur ibi caeco correpta veneno,
ut cadat e regione loci, qua derigit aestus.
quo cum conruit, hic eadem vis illius aestus
reliquias vitae membris ex omnibus aufert.
quippe etenim primo quasi quendam conciet aestum;
posterius fit uti, cum iam cecidere veneni
in fontis ipsos, ibi sit quoque vita vomenda
propterea quod magna mali fit copia circum.
Fit quoque ut interdum vis haec atque aestus Averni
aera, qui inter avis cumquest terramque locatus,
discutiat, prope uti locus hic linquatur inanis.
cuius ubi e regione loci venere volantes,
claudicat extemplo pinnarum nisus inanis
et conamen utrimque alarum proditur omne.
hic ubi nixari nequeunt insistereque alis,
scilicet in terram delabi pondere cogit
natura, et vacuum prope iam per inane iacentes
dispergunt animas per caulas corporis omnis.

*

frigidior porro in puteis aestate fit umor,

Pont. for *argento*. 813 *audisve* Flor. 31 Camb. Mar. for *audire*. 815 *necessis* Lach. for *necessest*. 817 *apertum* B. *aperta* A Nicc. vulg. before Lach. *apertaque* Flor. 31. 818 *et*. *ea* Lach. ever intolerant of *et* for *etiam*. *alitibus* Flor. 31 Camb. Mar. for *malitbus*. 829 *fit*. *sit* Junt. Lamb. vulg.: a solecism. 832 *hic* Mon. p. m. Lach. for *hinc*. *linquatur* Flor. 31 Camb. Ver. Ven. Mar. for *linquitur*. 840 clearly something is wanting to connect this verse with what precedes. Lach. has proved that a new leaf, the 142nd, of the archetype began here: in all probability then one leaf had dropped out in this place. Lach. inserts four fragments, *Non mihi si linquae centum sint oraque centum*, *Aerea vox*. *Mensibu' frigus*. *Cameraeque caminis*. *Ne oblimet*. The first certainly appears Lucretian: where it came in the poem, cannot be said; the rest are very doubtful. 840 *Que* is prefixed to *Frigidior* in A, *uae* (i.e. *quae*) in B, *Cur* by

rarescit quia terra calore et semina siquae
forte vaporis habet, propere dimittit in auras.
quo magis est igitur tellus effeta calore,
fit quoque frigidior qui in terrast abditus umor.
frigore cum premitur porro omnis terra coitque
et quasi concrescit, fit scilicet ut coeundo
exprimat in puteos siquem gerit ipsa calorem.
Esse apud Hammonis fanum fons luce diurna
frigidus et calidus nocturno tempore fertur.
hunc homines fontem nimis admirantur et acri
sole putant supter terras fervescere raptim,
nox ubi terribili terras caligine texit.
quod nimis a verast longe ratione remotum.
quippe ubi sol nudum contractans corpus aquai
non quierit calidum supera de reddere parte,
cum superum lumen tanto fervore fruatur,
qui queat hic supter tam crasso corpore terram
percoquere umorem et calido satiare vapore?
praesertim cum vix possit per saepta domorum
insinuare suum radiis ardentibus aestum.
quae ratiost igitur? nimirum terra magis quod
rara tepet circum fontem quam cetera tellus
multaque sunt ignis prope semina corpus aquai.
hoc ubi roriferis terram nox obruit umbris,
extemplo penitus frigescit terra coitque.
hac ratione fit ut, tamquam compressa manu sit,
exprimat in fontem quae semina cumque habet ignis,
quae calidum faciunt aqüae tactum atque saporem.
inde ubi sol radiis terram dimovit obortus

Nicc. 841 *Rarescit* Lamb. for *Arescit*. *semina* Flor. 31 Camb. for *semi*. *si quae* Avanc. at end of Catullus for *siqua* which he kept in Ald. 1 as did all editors before Lach. 842 *habet*, *propere* Nicc. Camb. Mon. Ver. Ven. vulg. for *habet proprie* B Flor. 31, *propriae* A. *proprii* Bern. whom I followed in small ed. forgetting that Nicc., i.e. Poggio's ms. in all likelihood, had *propere*. 846 *ut coeundo* Lamb. for *in coeundo*. *in quo eundo* Nicc. 851 *raptim* Lamb. for *partim*. 857 *supter* Pont., *subter* Mar. Ald. 1 Junt. for *super*. 858 *satiare* Vat. 1954 Othob. Pius in notes, Turneb. advers. XXVI 13 for *soclare*. *sotiare* Camb. Avanc. *sol dare* Nicc. *sociare* Flor. 31 Mar. Junt. *donare* Bern. 862 *Rara* Lamb. Turneb. adv. XXVI 13 for *Para*. *tepet* Lach. for *tenet*. 864 *umbris* Mar. (ap. Victor., not in ms.), Avanc. at end of Catull., Junt. for *undis*. 865 *penitus* Lach. for *sonitus*. *subtus* Ald. 1 Junt. vulg. *solito* Mar. 868 *aqüae* Lach.

et rarefecit calido gliscente vapore,
rursus in antiquas redeunt primordia sedes
ignis et in terram cedit calor omnis aquai.
frigidus hanc ob rem fit fons in luce diurna.
praeterea solis radiis iactatur aquai
umor et in lucem tremulo rarescit ab aestu;
propterea fit uti quae semina cumque habet ignis
dimittat; quasi saepe gelum, quod continet in se,
mittit et exolvit glaciem nodosque relaxat.
  Frigidus est etiam fons, supra quem sita saepe
stuppa iacit flammam concepto protinus igni,
taedaque consimili ratione accensa per undas
conlucet, quocumque natans impellitur auris.
nimirum quia sunt in aqua permulta vaporis
semina de terraque necessest funditus ipsa
ignis corpora per totum consurgere fontem
et simul exspirare foras exireque in auras,
non ita multa tamen, calidus queat ut fieri fons,
propterea dispersa foras erumpere cogit
vis per aquam subito sursumque ea conciliari.
quod genus endo marist Aradi fons, dulcis aquai
qui scatit et salsas circum se dimovet undas;
et multis aliis praebet regionibus aequor
utilitatem opportunam sitientibu' nautis,
quod dulcis inter salsas intervomit undas.
sic igitur per eum possunt erumpere fontem
et scatere illa foras, in stuppam semina quae cum

after Bede for *laticis*: Lamb. too notices it in notes. *saporem* Lamb. for *vaporem*: a necessary change, though Bede also has *vaporem*. 870 *gliscente* Wak. for *miscente*, 'eleganter et vere' says Lach. 877 *Dimittat* Camb. for *Demittat*.

878 *nodosque* Vat. 3276 Mon. (not Flor. 31) Pont. Ald. 1 Candidus at end of Junt. for *nobosque*. *novosque* A corr. *venasque* Flor. 31 Camb. 3 Vat. Mar. Junt.

879 *Frigidus* Flor. 31 Camb. Mon. Ver. Ven. for *frigus*. 887 *Non ita multa* Is. Voss. in ms. notes for *Non ita muita*: though Haverc. knew of this, neither he nor any editor before Lach. adopted it. *Non tam vita* Nicc. *Non tam multa* Pont. *Non tam viva* vulg. 888 *Propterea* Lach. for *Praeterea*. 890 *marist Aradi fons* Bern. Lach. for *maris parat fons*: a certain correction, as A and B have each this heading 'de fonte aradi in mare'. *mari Aradio fons* Is. Voss. in ms. notes. *mari spirat fons* Flor. 31 Camb. Mar. etc. 889 *conciliari* Lamb. for *conciliare*.

892 *praebet* Flor. 31 Camb. Mar. Junt. for *praeter*. 894 *dulcis* Flor. 31 Camb. Ver. Ven. for *dulcit*. 896 *quae* Ven. (*que* mss. Brix. Ver.) rightly retained by N. P. Howard who corrects old punctuation. *quo* Lamb. vulgo Lach.

conveniunt aut in taedai corpore adhaerent,
ardescunt facile extemplo, quia multa quoque in se
semina habent ignis stuppae taedaeque latentis.
nonne vides etiam, nocturna ad lumina linum
nuper ubi extinctum admoveas, accendier ante
quam tetigit flammam, taedamque pari ratione?
multaque praeterea prius ipso tacta vapore
eminus ardescunt quam comminus imbuat ignis.
hoc igitur fieri quoque in illo fonte putandumst.
  Quod superest, agere incipiam quo foedere fiat
naturae, lapis hic ut ferrum ducere possit,
quem Magneta vocant patrio de nomine Grai,
Magnetum quia fit patriis in finibus ortus.
hunc homines lapidem mirantur; quippe catenam
saepe ex anellis reddit pendentibus ex se.
quinque etenim licet interdum pluresque videre
ordine demissos levibus iactarier auris,
unus ubi ex uno dependet supter adhaerens
ex alioque alius lapidis vim vinclaque noscit:
usque adeo permananter vis pervolat eius.
  Hoc genus in rebus firmandumst multa prius quam
ipsius rei rationem reddere possis,
et nimium longis ambagibus est adeundum;
quo magis attentas auris animumque reposco.
  Principio omnibus ab rebus, quascumque videmus,
perpetuo fluere ac mitti spargique necessest
corpora quae feriant oculos visumque lacessant.
perpetuoque fluunt certis ab rebus odores;
frigus ut *a* fluviis, calor ab sole, aestus ab undis
aequoris exesor moerorum litora propter.
nec varii cessant sonitus manare per auras.

897 *aut in tedai corpore* Is. Voss. in ms. notes for *aut indeda corpora*: *in tedai* Pont. also. *in teda cum corpora* Mar. s. m. Ald. 1 Junt. 898 *quia* Flor. 31 Camb. Mar. for *qui*. 899 *latentis* Bern. for *tenentes*. *tepentis* Lach. 907 *lapis* B corr. Flor. 31 Camb. Pont. Mar. for *lapsi*. 908 *Quem* B corr. Flor. 31 Camb. Mar. for *Quam*. 909 *fit*. *sit* Nicc. Flor. 31 Mon. vulg. 'parum Latine' says Lach.: but it is I think defensible, as giving their motive, not the poet's inference: comp. III 100 *Harmoniam Grai quam dicunt, quod faciat nos*. *ortus*. *ortu* Lach. as II 387. 912 *Quinque* B corr. Flor. 31 Mar. for *Qui neque*. 913 *demissos* Lamb. first for *demisso*. 916 *permananter* Flor. 31 Camb. Mar. for *permanater*. *pervolat* Turneb. adv. XXVI 13, Bentl. for *pervalet*. [925 *ut*. *it* Kannen-

denique in os salsi venit umor saepe saporis,
cum mare versamur propter, dilutaque contra
934 cum tuimur misceri absinthia, tangit amaror.
usque adeo omnibus ab rebus res quaeque fluenter
930 fertur et in cunctas dimittitur undique partis
nec mora nec requies interdatur ulla fluendi,
perpetuo quoniam sentimus, et omnia semper
cernere odorari licet et sentire sonare.

936 Nunc omnis repetam quam raro corpore sint res
commemorare; quod in primo quoque carmine claret.
quippe etenim, quamquam multas hoc pertinet ad res
noscere, cum primis hanc ad rem protinus ipsam,
qua de disserere adgredior, firmare necessest
nil esse in promptu nisi mixtum corpus inani.
principio fit ut in speluncis saxa superne
sudent umore et guttis manantibu' stillent.
manat item nobis e toto corpore sudor,
crescit barba pilique per omnia membra, per artus.
diditur in venas cibus omnis, auget alitque
corporis extremas quoque partis unguiculosque.
frigus item transire per aes calidumque vaporem
sentimus, sentimus item transire per aurum
atque per argentum, cum pocula plena tenemus.
denique per dissaepta domorum saxea voces
pervolitant, permanat odor frigusque vaposque
ignis, qui ferri quoque vim penetrare suëvit
denique qua circum Galli lorica coercet.
956 et, tempestate in terra caeloque coorta,
955 morbida visque simul cum extrinsecus insinuatur,
in caelum terrasque remotae iura facessunt,

giesser in Philologus IV supplem. B p. 510.] 935 again om. by Lach.: see IV 229. 937 *claret* Flor. 31 Camb. Mar. for *clare.* 941 *mixtum corpus* Brix. (not Flor. 31) Pont. Mar. for *corpus mixtum.* 942 *superne* Lach. for *superna.* 954 *Galli* Lach. for *caeli.* *coli* Nicc. *colli* Brix. Ver. Ven. Mar. Avanc. Nauger. Wak. *corpus* Mar. al. em. Junt. Lamb. ed. 1 and 2. *corii* Flor. 31 Camb. 3 Vat. Lamb. ed. 3. 955 956 I have transposed: comp. 1098 foll.: Lach. awkwardly puts it after 947: Bern. keeps it in its place and reads *E tempestate in... coortast...remotas iure*; but *remotae* clearly belongs to *tempestate.* 955 *tempestate in* Lach. for *tempestatem.* *tempestates...coortae* Avanc. followed by Nauger. Lamb. etc. 957 *iure* B Vienna frag. A corr. Flor. 31 Camb. all Vat. Pont. *in re* Nicc.

quandoquidem nil est nisi raro corpori' nexu.

Huc accedit uti non omnia, quae iaciuntur
corpora cumque ab rebus, eodem praedita sensu
atque eodem pacto rebus sint omnibus apta.
principio terram sol excoquit et facit are,
at glaciem dissolvit et altis montibus altas
extructas*que* nives radiis tabescere cogit.
denique cera liquefit in eius posta vapore.
ignis item liquidum facit aes aurumque resolvit,
at coria et carnem trahit et conducit in unum.
umor aquae porro ferrum condurat ab igni,
at coria et carnem mollit durata calore.
barbigeras oleaster eo iuvat usque capellas,
effluat ambrosius quasi vero, et nectare tinctus;
qua nil est homini quod amariu' frondeat esca.
denique amaracinum fugitat sus et timet omne
ungentum; nam saetigeris subus acre venenumst,
quod nos interdum tamquam recreare videtur.
at contra nobis caenum taeterrima cum sit
spurcities, eadem subus haec iucunda videtur,
insatiabiliter toti ut volvantur ibidem.

Hoc etiam superest, ipsa quam dicere de re
adgredior quod dicendum prius esse videtur.
multa foramina cum variis sint reddita rebus,
dissimili inter se natura praedita debent
esse et habere suam naturam quaeque viasque.
quippe etenim varii sensus animantibus insunt,
quorum quisque suam proprie rem percipit in se;
nam penetrare alio sonitus alioque saporem

which is the same thing. *iurae* A p. m. caused by *remotae,* or as Lach. says because the archetype had both *iure* and *iura* which he reads and I now read: see notes 2.

958 *raro corpori' nexu* Lach. for *raro corpore nexum.* 962 *sol* Flor. 31 Camb. Mar. etc. for *quo.* 964 *que* added by Flor. 31 Pont. Mar. Ald. 1 Junt. *extructas ningueis* Avanc. at end of Catull. *alte Extructas ningues* Nauger.

965 *liquefit.* *liquescit* Vat. 640 Urbin. Ver. Ven. Ald. 1 Junt. (not Mar.) Lamb. 'liquescit. s' Heins. in ms. notes: but on this cod. Modii see introduction p. 24.

971 *ambrosius* Ed. for *ambrosias.* *ambrosiae quasi vere et nectari' linctus* Lach. elegantly, perhaps rightly. 972 *Qua...amariu' frondeat esca* Lach. for *Qua... marius fronde ac exscet* A, *extet* B Vienn. fragm. Nicc.: *amarius* Flor. 31 Camb. two Vat. Mar. 973 *amaracinum* Mar. Junt. for *maracinum.* 977 *iucunda* Camb. Mar. Ald. 1 Junt. Gif. for *ciunda* A, *inunda* B. *iocunda* Flor. 31

cernimus e sucis, alio nidoris odores.
991 praeterea manare aliud per saxa videtur,
atque aliud lignis, aliud transire per aurum,
argentoque foras aliud vitroque meare.
nam fluere hac species, illac calor ire videtur,
995 atque aliis aliut citius transmittere eadem.
scilicet id fieri cogit natura viarum
multimodis varians, ut paulo ostendimus ante,
990 propter dissimilem naturam textaque rerum.
998 Quapropter, bene ubi haec confirmata atque locata
omnia constiterint nobis praeposta parata,
quod superest, facile hinc ratio reddetur et omnis
causa patefiet quae ferri pelliciat vim.
principio fluere e lapide hoc permulta necessest
semina sive aestum qui discutit aera plagis,
inter qui lapidem ferrumque est cumque locatus.
hoc ubi inanitur spatium multusque vacefit
in medio locus, extemplo primordia ferri
in vacuum prolapsa cadunt coniuncta, fit utque
anulus ipse sequatur eatque ita corpore toto.
nec res ulla magis primoribus *ex* elementis
indupedita suis arte conexa cohaeret
quam validi ferri natura et frigidus horror.
quo minus est mirum, quod dico, ibus ex elementis
corpora si nequeunt e ferro plura coorta
in vacuum ferri, quin anulus ipse sequatur;
quod facit, et sequitur, donec pervenit ad ipsum
iam lapidem caecisque in eo compagibus haesit.
hoc fit idem cunctas in partis, unde vacefit
cumque locus, sive e transverso sive superne

two Vat. *munda* Nicc. *res munda* Lamb. 986 987 *alio, alioque, alio. alia, aliaque, alia* Lamb. 988 989=995 996 (996 997). 991 *lignis* Wak. Lach. for *ignis. tignis* Flor. 31 Camb. Mar. Ald. 1 Junt. *per ligna* Lamb. 997 (990) first placed here by Lamb. not Wak. 1001 *pelliciat vim* Flor. 31 Camb. Mar. for *peliciatum* B, *perliceatum* A. 1006 *ferri* Flor. 31 Camb. Pont. Mar. for *ferre.* 1007 *fit utque* Mar. Nauger. for *fit ut qui.* 1009 *ex* added by B corr. Flor. 31 Pont. Mar. *tunc* Camb. 1011 *natura et* Wak. for *naturae.* 1012 *quod dico, ibus ex elementis* Ed. for *quod dicitur ex elementis. quo ducitur* Lach. which I do not understand. *quod paulo diximus onte* Lamb. wildly. *quod ducitur, [ex elementis]* Bern. 1013 *e ferro* B Camb. Avanc.

corpora continuo in vacuum vicina feruntur;
quippe agitantur enim plagis aliunde nec ipsa
sponte sua sursum possunt consurgere in auras.
huc accedit item (quare queat id magis esse,
haec quoque res adiumento motuque iuvatur)
quod, simul a fronte est anelli rarior aer
factus inanitusque locus magis ac vacuatus,
1033 continuo fit uti qui post est cumque locatus
1026 aer a tergo quasi provehat atque propellat.
semper enim circumpositus res verberat aer;
sed tali fit uti propellat tempore ferrum,
parte quod ex una spatium vacat et capit in se.
1030 hic, tibi quem memoro, per crebra foramina ferri
parvas ad partis subtiliter insinuatus
trudit et inpellit, quasi navem velaque ventus.
1034 denique res omnes debent in corpore habere
aera, quandoquidem raro sunt corpore et aer
omnibus est rebus circumdatus adpositusque.
hic igitur, penitus qui in ferrost abditus aer,
sollicito motu semper iactatur eoque
verberat anellum dubio procul et ciet intus
scilicet: ille eodem fertur quo praecipitavit
iam semel et partem in vacuam conamina sumpsit.
Fit quoque ut a lapide hoc ferri natura recedat
interdum, fugere atque sequi consueta vicissim.
exultare etiam Samothracia ferrea vidi
et ramenta simul ferri furere intus ahenis
in scaphiis, lapis hic Magnes cum subditus esset:
usque adeo fugere ab saxo gestire videtur.

te ferro A. *te ferre* Nicc. whence *referre* Brix. Ver. Ven. *de ferro* Flor. 31 Mar. Junt. vulg. before Lach. 1018 *e* Flor. 31 Camb. for *et. ex* Mon. Ver. Ven. 1020 *plagis* Flor. 31 Camb. Pont. Mar. for *plagit.* 1022 1023 not a letter is to be changed: only the stopping is to be mended. *item. utei* Lach. *iuvatur. iuvetur* Lach.; Wak. has been misled by a blunder of Haverc. 1025 *magis* Camb. Ver. Ven. Mar. for *magnis. magis locus* Flor. 31. 1026 (1033) first placed here in Ald. 1 and Junt. not by Pont. or Mar. 1027 *Aer a tergo* Mar. Ald. 1 Junt. for *Erat ergo.* 1032 *Parvas. Privas* Gif. *Primas* Lamb. ed. 3. 1033 *ventus* Pius for *ventis.* 1040 *ille* Lach. for *illo* B Vienn. frag.: om. A Nicc. Camb. etc. *atque* Flor. 31 Mar. Junt. vulg. *isque* Wak. conj. 1047 *ab saxo* Lach. for *a saxo.* 1059 *Et* Lach. for *At* BA corr.

aere interposito discordia tanta creatur
propterea quia nimirum prius aestus ubi aeris
praecepit ferrique vias possedit apertas,
posterior lapidis venit aestus et omnia plena
invenit in ferro neque habet qua tranet ut ante.
cogitur offensare igitur pulsareque fluctu
ferrea texta suo; quo pacto respuit ab se
atque per aes agitat, sine eo quod saepe resorbet.
illud in his rebus mirari mitte, quod aestus
non valet e lapide hoc alias impellere item res.
pondere enim fretae partim stant: quod genus aurum;
et partim raro quia sunt cum corpore, ut aestus
pervolet intactus, nequeunt inpellier usquam;
lignea materies in quo genere esse videtur.
interutrasque igitur ferri natura locata
aeris ubi accepit quaedam corpuscula, tum fit,
inpellant ut eam Magnesia flumine saxa.
  Nec tamen haec ita sunt aliarum rerum aliena,
ut mihi multa parum genere ex hoc suppeditentur
quae memorare queam inter se singlariter apta.
saxa vides primum sola colescere calce.
glutine materies taurino iungitur uno,
ut vitio venae tabularum saepius hiscant
quam laxare queant compages taurea vincla.
vitigeni latices aqüai fontibus audent
misceri, cum pix nequeat gravis et leve olivom.
purpureusque colos conchyli iungitur uno
corpore cum lanae, dirimi qui non queat usquam,
non si Neptuni fluctu renovare operam des,
non, mare si totum velit eluere omnibus undis.

Ad A p. m. *Ac* Nicc. Flor. 31 Camb. Mon. vulg. 1062 *Interutrasque. Interutraque* Lach. 1064 *eam* Mar. Ald. 1 Junt. for *eum*. *flumine* Nicc. Flor. 31 all Vat. Brix. Ver. Ven. for *flumina*. *flumina saxi* Wak. 1067 *singlariter* Flor. 31 Pont. Avanc. Nauger. vulg. for *singulariter*: comp. 1088 *coplata* AB p. m. *copulata* corr. *inter singillariter* Lach.: a most unrhythmical verse. *apta* Flor. 31 Camb. etc. for *aptam*. 1068 *vides* Pont. Mar. Ald. 1 Junt. for *vide*. *colescere* Lach. for *coolescere*. *coalescere* Nicc. Flor. 31 3 Vat. Mon. 1069 *uno* Lach. for *una*, as in 1074: but Mar. Junt. Lamb. etc. there read *una*: *uno* is not certain.
1072 *aqüai*. *in aquai* Mar. Ald. 1 Junt. vulg. wrongly: comp. 552 and 868.
1077 *eluere* B corr. Vienn. frag. Mar. for *eiuere* B, *eiuvere* A Nicc. 1078 *non*

denique non auro res aurum copulat una
aerique *aes* plumbo fit uti iungatur ab albo?
cetera iam quam multa licet reperire! quid ergo?
nec tibi tam longis opus est ambagibus usquam,
nec me tam multam hic operam consumere par est,
sed breviter paucis praestat comprendere multa.
quorum ita texturae ceciderunt mutua contra,
ut cava conveniant plenis haec illius illa
huiusque inter se, iunctura haec optima constat.
est etiam, quasi ut anellis hamisque plicata
inter se quaedam possint coplata teneri;
quod magis in lapide hoc fieri ferroque videtur.
  Nunc ratio quae sit morbis aut unde repente
mortiferam possit cladem conflare coorta
morbida vis hominum generi pecudumque catervis,
expediam. primum multarum semina rerum
esse supra docui quae sint vitalia nobis,
et contra quae sint morbo mortique necessest
multa volare. ea cum casu sunt forte coorta
et perturbarunt caelum, fit morbidus aer.
atque ea vis omnis morborum pestilitasque
aut extrinsecus ut nubes nebulaeque superne
per caelum veniunt, aut ipsa saepe coortae
de terra surgunt, ubi putorem umida nactast
intempestivis pluviisque et solibus icta.
nonne vides etiam caeli novitate et aquarum
temptari procul a patria quicumque domoque
adveniunt ideo quia longe discrepitant res?
nam quid Brittanni caelum differre putamus,
et quod in Aegypto est qua mundi claudicat axis,
quidve quod in Ponto est differre, et Gadibus atque

auro res Faber em. for *non res auro* B, *res auro* A Nicc. 1079 *Aerique aes* Lamb. excellently for *Aeraque*. 1083 *praestat* B Avanc. Bentl. *restat* A Nicc. vulg.
1089 *fieri* Flor. 31 Camb. Mar. etc. for *ferri*. 1090 to 1191, i.e. two leaves, are wanting in cod. Victor. or Mon.: the readings of 'Marul.' given to these vss. I have taken from Victorius' copy of Ven. spoken of in the introduction. 1091 *cladem* B. corr. Ald. 1 Junt. for *cradem*. 1099 *extrinsecus* B Ald. 1 Junt. *intrinsecus* A Nicc. 1100 *coortae* Lach. for *coorta*: but I am not sure it is necessary. 1101 *putorem*. *putrorem* Nauger. Lamb. etc.
1106 *Brittanni* Ed. for *Brittannis*. *Britannum* Lamb. 1109 *colore* Flor. 31

usque ad nigra virum percocto saecla colore?
quae cum quattuor inter se diversa videmus
quattuor a ventis et caeli partibus esse,
tum color et facies hominum distare videntur
largiter et morbi generatim saecla tenere.
est elephas morbus qui propter flumina Nili
gignitur Aegypto in media neque praeterea usquam.
Atthide temptantur gressus oculique in Achaeis
finibus. inde aliis alius locus est inimicus
partibus ac membris: varius concinnat id aer.
proinde ubi se caelum quod nobis forte alienum
commovet atque aer inimicus serpere coepit,
ut nebula ac nubes paulatim repit et omne
qua graditur conturbat et immutare coactat;
fit quoque ut, in nostrum cum venit denique caelum,
corrumpat reddatque sui simile atque alienum.
haec igitur subito clades nova pestilitasque
aut in aquas cadit aut fruges persidit in ipsas
aut alios hominum pastus pecudumque cibatus,
aut etiam suspensa manet vis aere in ipso
et, cum spirantes mixtas hinc ducimus auras,
illa quoque in corpus pariter sorbere necessest.
consimili ratione venit bubus quoque saepe
pestilitas et iam pigris balantibus aegror.
nec refert utrum nos in loca deveniamus
nobis adversa et caeli mutemus amictum,
an caelum nobis ultro natura coruptum
deferat aut aliquid quo non consuevimus uti,
quod nos adventu possit temptare recenti.
  Haec ratio quondam morborum et mortifer aestus

Vat. 640 Urbin. Ald. 1 Junt. for *calore*: so 722. *percoctaque saecla calore* Vat. 3276 Brix. Nauger. Lamb. 1115 *Aegypto* Flor. 31 Pont. Junt. for *Aegypta. Aegypti* Nicc. Ver. Ven.: hence *Aegypti in medio* Avanc. 1121 *Ut* Pont. Ald. 1 Junt. for *Ve.* 1122 *graditur conturbat* Flor. 31 Camb. Brix. Pont. for *graditus conturbas. Quadragitas graditus conturbas* Nicc. Ver. Ven. 1124 *reddatque* Flor. 31 Camb. Marul. for *reddetque.* 1132 *balantibus* Flor. 31 Marul. for *calantibus. talaribus* Nicc. old eds. 1135 *ultro* Avanc. for *vitro. intro* Nicc. *vitio* Flor. 31 Camb. *coruptum* Flor. 31 Lamb. ed. 1, Wak. *corumptum* AB: *corruptum* Nicc. *alienum* Bentl. *coortum* Lach. *inimicum* Io. Colombinus ap. Lamb. *cruentum* joint emend. of Lamb. Turneb. and Auratus. 1138 *mortifer*

finibus in Cecropis funestos reddidit agros
vastavitque vias, exhausit civibus urbem.
nam penitus veniens Aegypti finibus ortus,
aera permensus multum camposque natantis,
incubuit tandem populo Pandionis omnei,
inde catervatim morbo mortique dabantur.
principio caput incensum fervore gerebant
et duplicis oculos suffusa luce rubentes.
sudabant etiam fauces intrinsecus atrae
sanguine et ulceribus vocis via saepta coibat
atque animi interpres manabat lingua cruore
debilitata malis, motu gravis, aspera tactu.
inde ubi per fauces pectus complerat et ipsum
morbida vis in cor maestum confluxerat aegris,
omnia tum vero vitai claustra lababant.
spiritus ore foras taetrum volvebat odorem,
rancida quo perolent proiecta cadavera ritu.
atque animi prorsum *tum* vires totius, omne
languebat corpus leti iam limine in ipso.
intolerabilibusque malis erat anxius angor
adsidue comes et gemitu commixta querella.
singultusque frequens noctem per saepe diemque
corripere adsidue nervos et membra coactans
dissoluebat eos, defessos ante, fatigans.
nec nimio cuiquam posses ardore tueri
corporis in summo summam fervescere partem,
sed potius tepidum manibus proponere tactum
et simul ulceribus quasi inustis omne rubere
corpus, ut est per membra sacer dum diditur ignis.
intima pars hominum vero flagrabat ad ossa,

aestus Macrob. sat. vi 2 7, Pont. Ald. 1 Junt. Lamb. for *mortifer ae*: the last letters having dropped out. *mortifer aer* Lamb. in notes. *mortiferai* Camb. *morti' ferai* Lach. who is then driven to read in 1141 *morbus* for *ortus*: *orcus* Avanc.

1139 *in Cecropis* Macrob. l. l. Flor. 31 Camb. Pont. Junt. for *in Cecropit. in Cecropiis* A corr. Nicc. *Finibu' Cecropiis* Lamb. 1143 *omnei* Lach. *omni* Marul. Avanc. for *omnem* A. Nicc. *omne* B. *omnes Unde* Junt., *omnes Inde* Brix. Nauger. Lamb. etc. 1147 *atrae. atro* Vat. 640 Urbin. Ald. 1 Junt. Lamb. *artae* mss. of Macrob. vi 2 9. 1156 *tum* added by Wak. after *prorsum.* Flor. 31 Ver. Ven. vulg. add *et* before *omne*, perhaps rightly. 1165 *potius* Marul. Ald. 1 Junt. for *totius.* 1167 *dum. cum* A corr. Nicc. vulg. before Lach.

flagrabat stomacho flamma ut fornacibus intus.
nil adeo posses cuiquam leve tenveque membris
vertere in utilitatem, at ventum et frigora semper.
in fluvios partim gelidos ardentia morbo
membra dabant nudum iacientes corpus in undas.
1178 multi praecipites lymphis putealibus alte
1174 inciderunt ipso venientes ore patente:
insedabiliter sitis arida, corpora mersans,
aequabat multum parvis umoribus imbrem.
nec requies erat ulla mali: defessa iacebant
1179 corpora. mussabat tacito medicina timore,
quippe patentia cum totiens ardentia morbis
lumina versarent oculorum expertia somno.
multaque praeterea mortis tum signa dabantur,
perturbata animi mens in maerore metuque,
triste supercilium, furiosus voltus et acer,
sollicitae porro plenaeque sonoribus aures,
creber spiritus aut ingens raroque coortus,
sudorisque madens per collum splendidus umor,
tenvia sputa minuta, croci contacta colore
salsaque, per fauces raucas vix edita tussi.
in manibus vero nervi trahere et tremere artus
a pedibusque minutatim succedere frigus
non dubitabat. item ad supremum denique tempus
conpressae nares, nasi primoris acumen
tenve, cavati oculi, cava tempora, frigida pellis
duraque, in ore trucei rictum, frons tenta *tu*mebat.

1171 *Vertere in utilitatem* Lamb. for *verteret utilitatem*: but he reads also *posset* and suggests *quicquam* in 1170 without cause. *at ventum* Lach. for *ad ventum* which the older editors keep and connect with what follows: Lucr. prob. wrote *ad* for *at*. *frigora* Flor. 31 Camb. Marul. for *frigore*. 1174 (1178) brought here first by Nauger.: placed after 1171 by Marul. Junt. *lymphis* Flor. 31 Camb. Marul. for *nymphis*. 1176 *mersans* A Nicc. *inerrans* B. *messans* Vienn. frag. acc. to Rhein. mus. n. f. xv p. 409. *inurens* Bern.: but clearly B's reading is a mere clerical error. 1178 *mali* mss. of Macrob. vi 2 13, Brix. for *mari*. 1180 *ardentia morbis*. *ac nuntia mortis* Lach.: a fine, but not I think necessary emendation. 1186 *spiritus* Macrob. Flor. 31 Camb. Pont. for *spiritum*. 1187 *umor*. *humor* mss. of Macrob. vi 2 11 for *umum*. 1189 *raucas* mss. of Macr. Pont. Avanc. for *rauca*. *tussi* Marul. Junt. for *tusse*. *tussis* mss. of Macr. 1195 *in ore trucei* Ed. for *inoretiacet* B Vienn. frag. *inhoretiacet* A. *inhorret iacet* Nicc.: the *-et* is the common corruption of the old termination *-ei*; comp. 16 *coget* for *cogei* and 1199; so i 84 mss. *Triviat*, ii 636 *Armat et*. *rictum* Lamb. for *rectum*. *Duratusque horret rictus* Vat. 3276. *inhorrescens rictum* Lach. after Rutgersius. *inhorrebat rictum* Lamb. *in ore iacens rictu* Nonius. *tenta tumebat* Heins. in ms. notes and Lach. for *tenta mebat*. *tecta meabat* Nicc. *tenta meabat* Flor. 31 Camb. 2 Vat. Mon. *tenta manebat* Nonius B corr. Vat. 3276. 1196 *rigidi* Lach. for *rigida*. *post artus*. *post strati* Lamb. *prostrati* Pont. Junt. 1199 *ibei* Ed. for *ut est*: *ibei* became first *iuet*, then *ut est*: see n. to 1195. *vix* Lach. without force. 1200 *Ulceribus* Lamb. after Thucydides for *Viceribus*: *i* and *l* confused as in 500 other places: so 1271 *Viceribus*, *Visceribus* A corr. Nicc. vulg. here as there. Wak. in both places argues for *visceribus*; but A and B 1166 had *Et simul viceribus*; 1148 *Sanguine et viceribus*; v 995 *super vicerat tetra*, *viscera* A corr.; iv 1068 *Vicus enim*, *Ulcus* A corr.: thus in every place where the word occurs in Lucr. our sole original authority substituted *i* for *l*: this may serve to shew on what sandy foundations Wak. builds, when he maintains *iacere coniectum umorem* against *conlectum*, and fifty suchlike cases. 1205 *qui* Lamb. for *cul*.

1212 *his* Mon. Brix. Junt. for *iis*. *is* Flor. 31 Camb. *incesserat* Lamb. for *incusserat*. 1217 *exeiret* Lach., *exiret* Brix. for *exciret*. 1219 *solibus*.

nec nimio rigidi post artus morte iacebant.
octavoque fere candenti lumine solis
aut etiam nona reddebant lampade vitam.
quorum siquis ibei vitarat funera leti,
ulceribus taetris et nigra proluvie alvi
posterius tamen hunc tabes letumque manebat,
aut etiam multus capitis cum saepe dolore
corruptus sanguis expletis naribus ibat:
huc hominis totae vires corpusque fluebat.
profluvium porro qui taetri sanguinis acre
exierat, tamen in nervos huic morbus et artus
ibat et in partis genitalis corporis ipsas.
et graviter partim metuentes limina leti
vivebant ferro privati parte virili,
et manibus sine nonnulli pedibusque manebant
in vita tamen, et perdebant lumina partim:
usque adeo mortis metus his incesserat acer.
atque etiam quosdam cepere oblivia rerum
cunctarum, neque se possent cognoscere ut ipsi.
multaque humi cum inhumata iacerent corpora supra
corporibus, tamen alituum genus atque ferarum
aut procul apsiliebat, ut acrem exeiret odorem,
aut, ubi gustarat, languebat morte propinqua.
nec tamen omnino temere illis solibus ulla
comparebat avis, nec *tris*tia saecla ferarum

exeibant silvis. languebant pleraque morbo
et moriebantur. cum primis fida canum vis
strata viis animam ponebat in omnibus aegre;
extorquebat enim vitam vis morbida membris.
[incomitata rapi certabant funera vasta.]
nec ratio remedi communis certa dabatur;
nam quod ali dederat vitalis aeris auras
volvere in ore licere et caeli templa tueri,
hoc aliis erat exitio letumque parabat.
illud in his rebus miserandum magnopere unum
aerumnabile erat, quod ubi se quisque videbat
implicitum morbo, morti damnatus ut esset,
deficiens animo maesto cum corde iacebat,
funera respectans animam amittebat ibidem.
quippe etenim nullo cessabant tempore apisci
ex aliis alios avidi contagia morbi,
1245 lanigeras tamquam pecudes et bucera saecla.
1237 idque vel in primis cumulabat funere funus.
nam quicumque suos fugitabant visere ad aegros,
vitai nimium cupidos mortisque timentis
1240 poenibat paulo post turpi morte malaque,
desertos, opis expertis, incuria mactans.
qui fuerant autem praesto, contagibus ibant
atque labore, pudor quem tum cogebat obire
blandaque lassorum vox mixta voce querellae.
1246 optimus hoc leti genus ergo quisque subibat.
. . . .

sedibus Macrob. vi 2 14, Brix. Pont. Junt. 1220 *nec tristia* Macrob. l. l., Brix. Pont. Avanc. for *nectia*. *nec fortia* Flor. 31 Camb. 2 Vat. Mar. Junt. *nec noctibu'* Lamb. Pont. proposes also *agrestia*; and Mar. in marg. Ven. *inertia*. *nec noxia* Is. Voss. in ms. notes, Heins. in ms. notes, who also proposes *nec inertia*. 1221 *Exeibant* Lach. for *Exicbant* A, *Exibant* B, *Exiebant* Nicc. 1225 in my small ed. I placed before 1235: I still think that the poet's words would thereby be rendered more consecutive; but I now see that 1235 should not be severed from 1234, Lucr. having misapprehended a sentence of Thucydides: I have therefore now left 1225 in its place, as an imperfect fragment: see notes 2. 1234 *amittebat* B rightly. *imittebat* A. *mittebat* Nicc. whence much error. 1235 *apisci* Flor. 31 Camb. Brix. Pont. Mar. for *apiscit*. 1237 (1245) placed here by Bentl. after Thucyd.: Mar. Junt. Lamb. etc. put it after 1242 (1241). 1239 *visere* Flor. 31 Camb. for *utsere*. 1241 *Poenibat* Turneb. ap. Lamb. for *Poenibus at* (i.e. *Poenib. at*) B, *Poenibus et* A Nicc. etc.: comp. v 1071. 1242 *incuria* Flor. 31, *in curia*

inque aliis alium, populum sepelire suorum
certantes: lacrimis lassi luctuque redibant;
inde bonam partem in lectum maerore dabantur.
nec poterat quisquam reperiri, quem neque morbus
nec mors nec luctus temptaret tempore tali.
Praeterea iam pastor et armentarius omnis
et robustus item curvi moderator aratri
languebat, penitusque casa contrusa iacebant
corpora paupertate et morbo dedita morti.
exanimis pueris super exanimata parentum
corpora nonnumquam posses retroque videre
matribus et patribus natos super edere vitam.
nec minimam partem ex agris *is* maeror in urbem
confluxit, languens quem contulit agricolarum
copia conveniens ex omni morbida parte.
omnia conplebant loca tectaque; quo magis aestus
. . . .
confertos ita acervatim mors accumulabat.
multa siti protracta viam per proque voluta
corpora silanos ad aquarum strata iacebant
interclusa anima nimia ab dulcedine aquarum,
multaque per populi passim loca prompta viasque
languida semanimo cum corpore membra videres
horrida paedore et pannis cooperta perire
corporis inluvie, pelli super ossibus una,
ulceribus taetris prope iam sordique sepulta.
omnia denique sancta deum delubra replerat

Brix. Ver. Ven. for *incura*. 1247 one or more verses are evidently lost here, or the passage was left in an unfinished state. 1249 *in lectum* Mar. Junt. for *iniectum*: *in letum* Mar. p. m. in Mon. and Victorii Ven. 1250 *morbus* Flor. 31 Camb. Mon. for *morbo*. 1259 *ex agris is maeror* Ed. for *ex agris maeroris*. *is* was absorbed by *agris*; then *maeroris* was written to fill up the verse. 1260 *Confluxit, languens*. *Confluxit labes* Lach.: a violent alteration. 1262 *conplebant*. *complebat* Junt. not Pont. or Mar., *complebant* Lamb. for *condiebant*. *condebant* A corr. Nicc. *aestus*. *astu* Lach. *aestus* however agrees so entirely with the words of Thucydides, that I think a verse has fallen out such as *quo magis aestus Conficiebat eos* cet. *aestu* Mar. Junt. Bern. 1264 *protracta* Lach. for *prostratą*: Wak. reads *structa* for *strata* in 1265. 1265 *iacebant* Ver. Ven. for *tacebant*. *tacebant* Nicc. with *i* written over *t*: hence, while Flor. 31 Camb. etc. keep *tacebant*, Ver. Ven. which usually adhere to the older text of Nicc., have the corrected reading. 1271 *Ulceribus* Lamb. first for *Viceribus*. *Visceribus* A corr. Nicc. Flor.

corporibus mors exanimis onerataque passim
cuncta cadaveribus caelestum templa manebant,
hospitibus loca quae complerant aedituentes.
nec iam religio divom nec numina magni
pendebantur enim: praesens dolor exsuperabat.
nec mos ille sepulturae remanebat in urbe,
quo pius hic populus semper consuerat humari;
perturbatus enim totus trepidabat, et unus
quisque suum pro re *praesenti* maestus humabat.
multaque *res* subita et paupertas horrida suasit;
namque suos consanguineos aliena rogorum
insuper extructa ingenti clamore locabant
subdebantque faces, multo cum sanguine saepe
rixantes potius quam corpora desererentur.

31 Camb. all Vat.: Lach. separates 1270 from the context by [ ]. 1274 *manebant* Camb. Brix. vulg. for *manebat* A, *manebit* B. *tenebat* Lach. 1279 *Quo pius* Is. Voss. in ms. notes, Wak. Lach. *Huc pius* A Nicc. Camb. 2 Vat. Brix. Ver. Ven. *Quo prius* B Vienn. frag. Lamb. *Ut prius* Flor. 31 two Vat. Avanc. at end of Catull. Creech. *Ut pius* one Vat. Mar. Ald. 1 Junt. 'Lucretii ingenium parum cognoverunt qui praeoptant *prius*' says Lach.: yet the οἷς πρότερον ἐχρῶντο of Thuc. II 52 speaks strongly in favour of B and Lamb.: comp. Aen. IV 464 *piorum* Med., *priorum* Vat. Pal. etc. *humari. humare* N. P. Howard, perhaps rightly. 1280 *trepidabat* B. *repedabat* A Nicc. Flor. 31 Camb. two Vat. Mon. etc. 1281 *praesenti* added by Ed. *conpostum* Lach. *consortem* Flor. 31 Camb. Mar. before, Junt. Lamb. etc. after *pro re*. *cognatum* Avanc. 1282 *res subita et* Camb. Vat. 1136 and 1954 Othob. for *subita et* A, *subita fit* B. *res subitae et* Lach. *vis subita et* Flor. 31 Vat. 640 Urbin. Mar. Ald. 1 Junt. Lamb. *mors subita et* Bern.
1285 *faces* Flor. 31 Camb. Mar. for *fauces*.

END OF VOL. I.

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WITH NOTES AND A TRANSLATION

BY

H. A. J. MUNRO
FELLOW OF TRINITY COLLEGE CAMBRIDGE

FOURTH EDITION FINALLY REVISED

VOLUME II: EXPLANATORY NOTES

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LUCRETIUS.

NOTES II

EXPLAINING AND ILLUSTRATING THE POEM

JEROME, in his additions to the Eusebian chronicle, under the year of Abraham 1923 = Olymp. 171 3 = U.C. 660 or B.C. 94 has these words *Titus Lucretius poeta nascitur. postea amatorio poculo in furorem versus cum aliquot libros per intervalla insaniae conscribsisset quos postea Cicero emendavit, propria se manu interfecit anno aetatis* XLIIII. Donatus in his life of Virgil writes thus according to Reifferscheid Suetonii reliq. 55, *initia aetatis Cremonae egit [Vergilius] usque ad virilem togam, quam* XV *anno natali suo accepit isdem illis consulibus iterum duobus quibus erat natus, evenitque ut eo ipso die Lucretius poeta decederet.* Lucretius died then on the ides of October U.C. 699 in the second consulship of Pompey and Crassus; and Jerome has misdated the year of his birth by three or four years. Schoene's careful critical edition of the chronicle, founded on excellent manuscripts, enables us now to speak with confidence of Jerome's testimony. Two of the best of them assign the birth of Lucretius to the year of Abraham 1922 instead of 1923. In either case Jerome is wrong by a few years, as in many other instances; and we have not the key to explain the error. It appears to me as certain as such a point can well be, that Lucretius was born in the latter part of B.C. 99, or else in the early months of 98, as is assumed by Usener in the Rhenish Museum, vol. XXII p. 442 and vol. XXIII p. 678; since in either case he would be in his 44th year on the ides of October 55, U.C. 699. Now no one who has read what so many scholars have written on the question, Joseph Scaliger, Ritschl parergon p. 609—638, Mommsen Abh. saechs. Ges. II p. 669—693, Reifferscheid l. l. p. 363—435, will doubt that Jerome's additions to the chronicle are servilely copied from the lost work of Suetonius de viris illustribus, nor feel much less confidence that Donatus' account comes also from the same source. These are the sole circumstances

recorded of his life; nor is anything whatever known about his family: indeed the only other instance I have been able to find of the cognomen Carus attached to the name of Lucretius is a very doubtful one occurring in Mommsen's inscr. reg. Neapol. Lat. 1653 'Beneventi in aedibus archiepiscopi'. But Prof. Sellar well remarks that literary distinction at this time was almost confined to the higher classes; and we need not infer from the rarity of the cognomen that he did not belong to an old family. In this age the cognomen was often varied even in the same family: the father of the contemporary poet and orator C. Licinius Calvus is always called Licinius Macer; nay Calvus himself is once so styled by Cicero ad Q. fratrem II 41. Lucretius therefore may well have belonged to the high patrician gens of the Lucretii Tricipitini whose glories were chiefly linked with the early history of the commonwealth and were doubtless in great measure legendary, but not the less valued perhaps on that account. Though Lucius Publius and Spurius are more common among the Tricipitini, and a Hostus is named by Val. Maximus, yet a T. Lucretius was consul with P. Valerius in 246, the second year of the commonwealth, and again in 250 with the same colleague; Titus too was the name of the father and grandfather of L. Lucretius Tricipitinus who was consul and triumphed over the Aequi and Volsci in 292. Flavus appears in the fasti consulares as a cognomen of these Tricipitini. Ofella, Gallus, Trio are attached to other Lucretii, probably plebeians, but sufficiently illustrious. As Suetonius took great pains in searching out the best original authorities for all his statements, the facts mentioned above, even if somewhat coloured, must be accepted as true in the main, as Lachmann observes, p. 63; the more so that in February of the year 700 Cicero writes to his brother Quintus II 11 the well-known sentence *Lucretii poemata ut scribis ita sunt* cet. This is the only occasion on which he ever mentions the poet's name, and it proves that four months after the death of Lucretius he and his brother Quintus had read the poem which, as we saw in the introduction to notes 1, could not have been published in the author's lifetime. Now this seems too short a time for the Ciceros to have read and to be writing about the work, if neither of them had had anything to do with preparing it for publication. But to which of the two brothers does Jerome refer? in Latin or English when Cicero or Cæsar is mentioned, if there is nothing else to determine who is spoken of, the orator or the dictator is naturally implied; and Jerome in a dozen of his additions to the Eusebian chronicle thus denotes Marcus. But both Lachmann and Bernays decide that Quintus must be meant: 'in re nota' says the former 'nihil opus fuit ut Ciceronis praenomen poneret, cum nemo ignoraret Quintum intellegendum esse'. But why it should be a *res nota* to Jerome and his contemporaries or even to Suetonius I cannot see. Had Jerome found Quintus in his original, he must have added it, nor would Suetonius himself have omitted it. Nor can I perceive the least internal probability in favour of Quintus, who in those very months must have been thinking more of the art of war than the art of poetry; for in the summer of 700 he was fighting as Cæsar's legate in Gaul and Britain. And why should not Marcus be the editor? he does not appear to have been very actively employed during those months; and moreover he was one of those busy men who always find time for any fresh work they are called upon to do. It may have been a dying request of the poet's; for it is more than likely from what he says of Memmius that he would look on Cicero with admiration and esteem him as the saviour of his country. Cicero's virtues and abilities were just of the sort to excite the love and wonder of a retired student, who is more apt in practice to overrate than undervalue those who are engaged in active life, whatever his speculative sentiments may be. And here we are not left solely to conjecture: the many imitations we find in Lucretius of the few hundred extant lines of Cicero's Aratea prove, little as it might have been expected, that he looked upon this translation as one of his poetical models. Cicero, though he set small store on Epicurus and his system, was on terms of intimate friendship with the leading epicureans both Greek and Roman: to one of them, Philodemus as it now appears from the Herculanean fragments recently published, we know he was greatly indebted in his de natura deorum. And if Lucretius were quite unknown to him, a word from Atticus or even from Memmius would have made him undertake what would seem so slight a task to a man of his laborious and energetic habits. The poem must have been given to the world exactly as it was left by the author, with nothing added or taken from it to all appearance. If Cicero then was editor, he probably put it into the hands of some of his own amanuenses or entrusted it to the large copying establishment of Atticus; and he may have spent only a few hours in looking over it or hearing it read to him: his name rather than his time was probably wanted by the friends of Lucretius. All this would of course be the idlest guess-work, if it were not for the express statement of Jerome, that is of Suetonius, that he was editor; a statement which is in some measure confirmed by the younger Pliny, epist. III 15, who thus writes to his friend Proculus, *Petis ut libellos tuos in secessu legam examinemque an editione sint digni, adhibes preces, adlegas exemplum; rogas etiam ut aliquid subsecivi temporis studiis meis subtraham, inpertiam tuis: adicis M. Tullium mira benignitate poetarum ingenia fovisse.* The *exemplum* in question may well have been the poem of Lucretius: Cicero in truth may have stood in much the same relation to our poem that Augustus did to the Aeneid, patron more than actual editor. Such a function might be a compliment either to the author, as in the case of Lucretius and that mentioned by Pliny; or to the editor: comp. Probus' life of Persius

'leviter retractavit [Persii librum] Cornutus et Caesio Basso, petenti ut ipsi cederet, tradidit edendum'. Bassus was Persius' earliest friend: 'amicos habuit a prima adulescentia Caesium Bassum poetam cet.' Professor Sellar in his Roman poets of the republic p. 203, though not inclined to admit the editorship of Cicero, yet argues that Jerome must be speaking of Marcus. A brilliant critic in Macmillan's magazine, no. 67 p. 52, calls in question this tradition and finds it difficult to get over the fact that Lucretius is dismissed by Cicero in a dozen cold words. If however the whole circumstances of the case are examined, this difficulty will I believe wholly or in great measure disappear. These dozen words occur in a hurried note to his brother of less than a dozen lines; it is the only note addressed to Quintus during the whole and more than the whole interval between the death of Lucretius and the publication of his poem. The only other letters written by him during those months are a few formal dispatches to officials on public business, with the exception of one brief hurried note to Atticus written in November from his Tusculan, to which he had retired for a few days' relaxation. In this note he gives half a dozen words to his own de oratore which he tells Atticus is now fit for publication and may at once be transcribed by his copyists. He did not therefore write to Atticus or others about Lucretius, because he was in Rome, seeing Atticus daily and, if Lucretius' poem was then in his hands, discussing doubtless with him and others its merits and condition. I find in Cicero no such anxiety, as this writer finds, about the phrases of any friend's essay. The expression 'inhibere remos' occurred in his own academics: he had rashly allowed Atticus to substitute it in the copies already made for his own 'sustinere remos'. When he found out the true meaning of that nautical expression, he writes in the greatest hurry and trepidation to try and prevent the solecism going forth to the world, especially to the archcritic Varro to whom the work was dedicated. The mere mention then of Lucretius, slight as it is, would seem to indicate of itself some relation between him and the orator. As remarked on II 1092, it is not Cicero's custom to quote from contemporaries, numerous as his citations are from the older poets and himself. Had he written on poetry, doubtless Lucretius would have had a prominent place in it; but even where in his rhetorical works he criticises so fully the orators of the day, he abstains from quoting their words. In all his writings the name of Catullus does not once appear, though his poems deal so much with the topics and names of the day most interesting to Cicero; notwithstanding his brilliant compliment to the orator which must have been thoroughly felt, his agreement with him in politics, his lampoons on Caesar and the Caesarians; though they both in different ways suffered so grievously from Clodia or Lesbia the terrible 'Clytaemnestra quadrantaria', the Medea of the Palatine. It has been shewn in our

notes that more than once in his philosophical works he must refer to Lucretius. Had the poet been alive when the de finibus or the de natura was written, he might have taken the place of Torquatus or Velleius.

However this may be, it is certain enough that the poem was given to the world early in the year 700, and in the unfinished state in which it was left by the author: indeed I hardly like to say how strong my suspicions, even my convictions are, that many of the most manifest blunders in the poem as we now have it appeared in the very first edition of it whether from design or inadvertency: probably both; for later in this very year Cicero writes to his brother in Britain, III 6 6, that he despairs of procuring for him accurate copies of Latin writers, *ita mendose et scribuntur et veneunt*. It is not easy in any other way to explain the agreement of Macrobius and Nonius with the archetype of all existing manuscripts in some indisputable corruptions. The story of the poet's madness has been examined by Prof. Sellar l. l. p. 200. Whether there is any truth in it or not, it cannot be doubted that it was already current in Suetonius' time; yet few will deny 'that it would be strange if so remarkable a poem had been written in the lucid intervals of insanity'. This poem was designed to be a complete exposition of the physical system of Epicurus, not for the sake of the system itself, but in order to free the minds of men from the two greatest of all ills, fear of death and fear of the gods, by explaining to them the true nature of things. So far he followed in the steps of his master who with the same end in view composed among many other works one entitled περὶ φύσεως in 37 books, of which some wretchedly scanty and incomplete fragments have been published in the Herculanean volumes. How much Lucretius was indebted to this more important work may be gathered from the letters of Epicurus preserved in the tenth book of Diogenes Laertius, which give a brief epitome of his system and have been so largely used in this commentary. The poet's veneration for his teacher would constrain him to borrow from him his matter; his manner and style are altogether different. To Lucretius the truth of his philosophy was all-important: to this the graces of his poetry were made altogether subordinate. To us on the other hand the truth or falsehood of his system is of exceedingly little concern except in so far as it is thereby rendered a better or worse vehicle for conveying the beauties of his language and the graces of his poetical conceptions.

Is then the epicurean system well or ill adapted to these purposes? As a poet in that age could scarcely be the inventor of a new system of philosophy, Lucretius could hardly help adopting some one of those which were then in vogue; if not the epicurean, then the academical or peripatetical or stoical. To construct a poem out of either of the first two with its barren logomachies, wire-drawn distinctions without a

difference, would have truly been to twist a rope out of sand: of course I am speaking of these two systems as they were in the days of Cicero and Lucretius; though much the same might be said of them in the age of their first propounders. Well then the stoical? I unhesitatingly assert that for all purposes of poetry both its physical and ethical doctrines are incomparably inferior to those of Epicurus. Read the de natura deorum; compare their one wretched world, their monotonous fire, their rotund and rotatory god, their method of destroying and creating anew their world, with the system of nature unfolded by Lucretius, grand and majestical in its general outline, with some strangely suggestive anticipations of the latest marvels of physical science. Then look at their sterile wisdom and still more barren virtue with their repudiation of all that constitutes the soul of poetry. Lucretius on the other hand can preach up virtue and temperance and wisdom and sober reason with as loud a voice as any of your stoics; and then what inexhaustible resources does he leave himself in his *alma Venus* and *dux vitae dia voluptas*! Are examples wanted? then contrast the varied graces and exuberant beauty of Virgil, when he is pleased to assume the garb of an epicurean, with the leaden dulness and tedious obscurity of the stoic Manilius; or compare the rich humour and winning ways and ease of a Horace with the hardness and thinness and forced wit of a Persius. All this it may be said is in the men, not their systems. Yes, but the proper choice of a subject is half the battle. And yet the picturesque English historian speaks of the epicurean as the meanest and silliest of all systems; and one German critic after another sees fit to denounce it as beneath contempt. In this as in many other points the poet has received more justice at the hands of his latest English critic, and from the brilliant rhetoric of Martha in his Lucrèce. Lessing in his essay to prove that Pope because a poet could not be a metaphysician says 'if I am asked whether I know Lucretius, whether I know that his poetry contains the system of Epicurus, I would confidently answer, Lucretius and the like are versemakers not poets'; and again 'the poet speaks with Epicurus, when he would extol pleasure, and with the porch, when he would praise virtue'. But this is what Lucretius can and does do: virtue at all events he can praise on the broad grounds accepted by the general feeling of the world, if he is unable to adopt the narrow and intolerant views of his adversaries.

Lucretius possessed indeed in as high a degree as any Latin poet two qualities which a poet can ill dispense with, the power of vividly conceiving and of expressing his conceptions in words. This has enabled him to master the great outlines of the epicurean universe of things, and by a succession of striking images and comparisons drawn from the world of things which was going on before the eyes of him and his readers to impress this outline on their minds. The two first books

appear to be finished and to have received almost the last touches of the author with the exception perhaps of certain portions of the second, pointed out in their several places. The greater part of these books is devoted to a very complete and systematical account of the natures and properties which belong to the two great constituents of the universe, atoms and void. Given to him this universe in working order there is much that is striking, much even that may be true, much at all events that Newton accepted, in this description; something too in which he was in advance even of the age of Newton. We of course care, not for its scientific value or truth, but for its poetical grandeur and efficacy upon our imaginations; and in these respects we are most amply satisfied. The least interesting portions of these books are perhaps the episodes in which the rival systems of Heraclitus Empedocles and Anaxagoras are examined and refuted. They are closely connected with the general subject and the poet is much in earnest, but, as was indeed to be expected and as is pointed out in the proper place, he could only criticise them from his own point of view and starting from his own principles. The third book is likewise tolerably finished; and in no portion of his work does he more fully display his power of sustained and systematical reasoning. Here too, if his premisses are granted, his arguments are striking and effective, and carried through with the energy of a fanatical conviction. The poetry and pathos and earnest satire of the last 260 verses are of a very high order. The fourth book is in a much less complete condition than those which precede. Yet in the first part of it, in which the epicurean theory of images is expounded, he wrestles with its gigantic difficulties and often overcomes them with singular power energy and controversial address. And in truth the most obvious objections to this doctrine of images apply almost as strongly to the Newtonian theory of the emission of light which in spite of them so long maintained its ground. The later sections of the book, which explain the operations of the other senses, the way in which the mind and the will are excited, the theories of food, walking, sleep and the like, are more sketchy and unfinished, though they often shew acute observation. The concluding two hundred verses are very peculiar and display a satirical vein as powerful and much more subtle than that of Juvenal. The fifth book is also unequal: some few lines, pointed out in their place, are almost unworthy of the poet and seem to have been written down to fill up a gap until he found time to change them for better. The portions too in which he describes the movements of the sun and moon and stars will not afford any great gratification. But more than half the book, namely 416—508 and 771 to the end, are in his noblest manner. Nothing in Latin poetry surpasses, if it even equals these verses, in grandeur sublimity and varied beauty: occasionally too some fine touches of earnest satire are met with: in these passages, as well as in those mentioned

above, he nobly maintains the reputation claimed for his countrymen in that style of writing. The sixth book is unequal like the fifth: the beginning as far as 95 is very unsatisfactory and confused, as has been pointed out in the notes. Then follow some hundred verses in which the nature and working of thunder and lightning, the formation of clouds rain and the like are described. This portion is most carefully elaborated. There is not much room for the highest virtues of poetry; but still great qualities are here brought into play, quickness of observation and power of describing what is observed, vivacity of narrative, fine perception of analogy and much ingenuity of speculation: the language is simple, terse, direct and telling. Most of these merits are displayed in greater or less measure even in the flattest and most prosaic portions of the poem; but the verses here spoken of are not of this number. Quite recently I was glad to find the opinion I had long entertained of this section of the poem confirmed by the greatest of German critics in Riemer's Mittheilungen ueber Goethe II p. 645; and this is not the only place in which Goethe expresses the most unbounded admiration for our poet. What follows is not so satisfactory: Lucretius has to include a great variety of questions in a very limited space. These seem to be selected sometimes at hap-hazard: nearly 200 lines are given to the magnet, lively verses enough and very ingenious, but out of all proportion to the subject-matter. The description of the plague of Athens concludes the book: it is manifestly unfinished; and though it contains much noble poetry, it suffers from the unavoidable comparison with the austere beauty and simple grandeur of its original, which the poet has not always understood and from which he has sometimes departed without good cause. He has shewn himself here both too much and too little of a physician: he is too technical for the poet, too inaccurate for the philosopher.

In style and language Lucretius has manifestly adopted a somewhat archaic tone, differing more or less from that of his extant contemporaries. This has been occasioned mainly by his admiration for Ennius and Naevius and the old tragic poets Pacuvius and Accius: their extant fragments prove how carefully he had studied them. In Greek literature too his tastes seem to have carried him to the older and more illustrious writers. In this as in so many other respects he appears to have stood quite aloof from the prevailing fashions of his day; for the great mass of contemporary poets, among them even Catullus at all events in his heroic and elegiac poems, chose to form their style after Euphorion of Chalcis and the affected Alexandrine school of poets, Callimachus and the rest, whose influence extended far into the Augustan age, though they wrote in what was to themselves really a dead language. It is owing probably in great measure to his admiration for Lucretius that Virgil and thereby Latin poetry were saved from falling even more

than they did under this baneful influence. Epicurus of course Lucretius would study for other purposes than those of style, in which he would have found him but a sorry master; but the Greek writers still wholly or partly extant, whom, to judge by his imitations of them, he most loved and admired, were Homer Euripides Empedocles Thucydides and Hippocrates. Doubtless too he had carefully studied the old philosophers Democritus Anaxagoras and Heraclitus, but mainly for their philosophy. Plato he would seem to have known something of from more than one passage of his poem. His illustrious contemporary Cicero had like him an intense esteem for Ennius, a profound contempt for the 'cantores Euphorionis' who presumed to despise Ennius. Many years before Lucretius wrote his poem Cicero in boyhood had translated the works of Aratus. This translation of which large fragments are preserved shews much spirit and vivacity of language, though its poetical merits cannot be mentioned beside those of Lucretius. Yet the latter strangely enough, moved it may be by his general admiration for the man, had made this youthful production one of his models of style, as may be demonstrated, not by one or two, but by twenty manifest imitations of the few hundred lines still existing. In poetical diction and metrical skill Lucretius has surpassed not only this boyish essay, but doubtless their common master Ennius as well; for the first inventor is naturally left behind by his followers. Yet Lucretius undoubtedly wished it to be known that the latter was his master and model in Latin poetry. Free from all jealousy and empty pretension, he took every opportunity of acknowledging his obligations to those to whom he felt indebted: first and foremost to Epicurus who shewed the path which leads to truth and reason without which all other gifts were vain, and after him to Democritus and the other early Greek philosophers. Empedocles receives his homage partly as one of these, but mainly because he gave him the best model of a philosophical poem. Ennius is extolled at the beginning of his work as his master in Latin verse. Lucretius thus to all appearance stood aloof from the swarm of contemporary poets and left them to quarrel and fight among themselves, as even the best of them seem to have been ready to do. The Augustan poets of the first rank afford a rare and most pleasing example of brotherly harmony and good feeling; but if Catullus and Calvus had not died in early manhood, there are many indications that they and their school would have come into painful collision with Virgil and Horace and their partisans.

Notwithstanding the antique tinge which for poetical ends he has given to his poem, the best judges have always looked upon it as one of the purest models of the Latin idiom in the age of its greatest perfection. Fifty vouchers might be cited for this; but the following will suffice: Scaliger declares emphatically that there is no better writer than Lucretius of the Latin language. Lambinus and Lachmann have scarcely

been surpassed in modern times as Latin scholars and Latin writers, and both moreover studied Lucretius with unwearied diligence: the former who edited Plautus Cicero and Horace as well as Lucretius pronounces him to be 'omnium poetarum Latinorum qui hodie exstant et qui ad nostram aetatem pervenerunt elegantissimus et purissimus idemque gravissimus atque ornatissimus'; and in another place he tells Charles IX that the style of Cicero or Caesar is not purer than this poet's: the latter is never weary of extolling his 'sermonis castitas', his 'lactea ubertas' and the like. It is in the style and structure of his language that this purity is observable: in single words he has by no means obeyed the emphatic adjuration of his great contemporary to shun like a rock a new and unusual term; but has taken a poet's privilege to coin hundreds of new words which have been pointed out where they occur and to introduce not a few from the Greek. And here will be the place to make some remarks on the poet's own complaint of the poverty of his native tongue. We may first assert as an indisputable fact that in his day the living Latin for all the higher forms of composition both prose and verse was a far nobler language than the living Greek. Let not what is said be misunderstood. During the long period of Grecian preeminence and literary glory, from Homer to Demosthenes, all the manifold forms of poetry and prose which were invented one after the other, were brought to such an exquisite perfection, that their beauty of form and grace of language were never afterwards rivalled by Latins or any other people. But hardly had Demosthenes and Aristotle ceased to live, when that Attic which had been gradually formed into such a noble instrument of thought in the hands of Aristophanes Euripides Plato and the orators and had superseded for general use all the other dialects, became at the same time the language of the civilised world and was stricken with a mortal decay. It seems to have been too subtle and delicate for any but its wonderful creators. The Alexandrine poets who imitated earlier styles, and even the graceful Theocritus repeat parrot-like forms which they do not understand, because their meaning had been lost for centuries. If what is said of a Theocritus be thought presumptuous, there is no question that it is true of prose writers. Epicurus who was born in the same year as Menander writes a harsh jargon that does not deserve to be called a style; and others, of whose writings anything is left entire or in fragments, historians and philosophers alike, Polybius Chrysippus Philodemus, are little if at all better. When Cicero deigns to translate any of their sentences, see what grace and life he instils into their clumsily expressed thoughts! how satisfying to the ear and taste are the periods of Livy when he is putting into Latin the heavy and uncouth clauses of Polybius! This may explain what Cicero means, when at one time he gives to Greek the preference over Latin, at another to Latin over Greek: in reading Sophocles or Plato he would acknowledge

their unrivalled excellence; in translating Panaetius or Philodemus he would feel his own immeasurable superiority.

In three places Lucretius complains of the poverty of his native tongue: I 136 he says in general terms that he is aware how difficult it is to express in Latin verses the abstruse discoveries of the Greeks. But could a Greek poet express them in Greek verses? could a Homer or even a Euripides expound the theories of Aristotle or Chrysippus or Epicurus more clearly than Lucretius? Surely not: in the second book he has translated some anapaests of Euripides that consummate master of matured Attic, and there is no thought in them which he cannot express literally. Certainly in difficult questions Empedocles is more helpless than Lucretius, though he had an epic diction to imitate which had existed for centuries. The second passage is I 830 foll. where he observes that the poverty of his native speech does not permit him to express in Latin Anaxagoras' homoeomeria, but the meaning he can expound easily enough. And easily and lucidly enough he does explain it: the less he or any other poet Latin or Greek or English has to do with the word itself the better: it is not more poetical than entelechia or homoeusia, or the τὸ τί ἦν εἶναι itself. The third passage is III 218 2 5 8 foll. where he says that he would fain explain at greater length the way in which the different substances which compose the soul are mixed and work together, but the poverty of his native speech compels him to be brief. Whether he is brief or not, he explains an intricate question as clearly as any Greek writer in prose or verse would be likely to do. One might more justly object to Lucretius that he has too much instead of too little technical language for a poet. Whatever Greek writer Cicero wishes to explain, he can find adequate Latin terms to express the Greek, even if they are those of Plato or Aristotle: is it a new sense given to a word in common use? he can always meet λόγος or εἶδος with *ratio* or *species*: is it a newly coined word? his *qualitas* is quite as good as Plato's ποιότης. Nay from the force of circumstances *species qualitas quantitas* have had a much longer life and a far more extended application than εἶδος ποιότης and ποσότης. Had Cicero chosen to apply the prolific energy of his intellect to the task, he might have invented and wedded to beautiful language as copious a terminology as was afterwards devised by the united efforts of Tertullian and the other fathers, Aquinas and the other schoolmen; from which the most cultivated modern languages derive the chief portion of that wealth in scientific terms which enables them to claim in that respect a superiority over Latin. But the language of Latin poetry would assuredly not have been improved thereby. That however he, like Cicero, sometimes entertained a more favourable opinion of his language and his art would appear from such expressions as the twice recurring *quod obscura de re tam lucida pango Carmina, musaeo contingens cuncta lepore.*

The Lucretian hexameter occupies an important place in the history of Latin poetry, coming as it does between that of Ennius who invented and that of Virgil who brought this metre to perfection. What Ennius did in this matter is a curious study: he not only was the first to introduce this new and strange form of verse into the language on which it was to continue to exercise so great an influence ever after; but he laid down for it laws of prosody differing in many essential points from those observed by himself in his tragedies as well as by all the other tragic and comic poets of his own and the following age. These laws, transmitted from one generation to another, taught as a necessary part of a liberal education and enforced on the writers of elegiac and lyrical as well as of heroic verse, had no doubt a large share in fixing for many centuries the outward form and inner nature of the language, the tendency of which, as of its cognate dialects Oscan Umbrian and the like, was towards rapid change; though perhaps in the end they caused it to come down with a heavier crash, when at last the gulf between it and the debased and degraded speech of the people became too immense. The history of Attic and vulgar Greek is very similar. Complete however as Ennius' system of quantity was, quite as complete as that of Virgil, his rhythm from the nature of the case was somewhat rude and uncouth; he attempted to imitate the Greek structure of verse in points where there appeared to be a natural incompatibility between it and the Latin. There is not evidence to shew by what steps this rhythm was gradually improved, until at length in the hands of Virgil it attained that elaborate and complicated yet exquisite perfection, which is utterly different from the Homeric movement, and yet appears as well adapted to the Latin forms of speech as the other is to the Ionic. We have however sufficient proof that Lucretius gave to the form of his verse as well as to his language an antique colouring, as if he wished in this respect too to break with his contemporaries and approach to the manner of Ennius. He is however a far more finished master of versification than Ennius, and his most striking violations of the laws of construction habitually observed by his contemporaries or immediate predecessors often produce very fine and harmonious effects. That he is more archaic in these respects than his age may be proved not only by a comparison between him and Catullus, but by taking note of the laws of metre observed by Cicero in his youthful hexameters, which he must therefore have learnt from his teachers. Let us examine briefly some of the leading differences between the verse of Lucretius and that of Virgil and certain other authors. In the Latin and Greek hexameter alike the rhythm mainly depends on the caesura. The due observance of this caesura together with a manifold variety in the flow of the verse forms the great charm both of the Greek and the Latin heroic; and examples of its violation are exceedingly rare in Homer Lucretius and Virgil alike. But other rules observed with equal care by Virgil and Catullus are repeatedly and intentionally neglected by Lucretius. Thus we find in him hundreds of instances in which the first two feet are marked off from the rest of the verse in the following unusual modes taken at random from his six books: with two dactyls at the beginning *Religionibus atque minis, Omnia denique sancta, Suscipiendaque curarit, Quippe patentia cum, Vertice Palladis ad templum*: with a spondee and dactyl *Ergo vivida vis, At primordia gignundis, Praetermittere et humanis, Aut extrinsecus ut*: more rarely a dactyl and spondee or two spondees, but then a monosyllable must follow, *Sive voluptas est, Non temere ulla vi*; *Inmortali sunt, Nam cum multo sunt, Vis est, quarum nos*: once indeed with great boldness, but with singularly happy effect, III 527 *Et membratim vitalem deperdere sensum*. Instances of such rhythms in Virgil may be counted on the fingers: he has *Scilicet omnibus est labor inpendendus, Armentarius Afer, Sed tu desine velle, Spargens umida mella*, probably in imitation of Lucretius; and *Per conubia nostra* after Catullus' *Sed conubia laeta*, with him too a mere exceptional rhythm for a peculiar effect. In Cicero's early work the Aratea similar instances are found, *Verum tempora sunt, Inclinatior atque*; but they are rarer than in Lucretius: in the 80 or 90 verses still remaining of his poem de consulatu suo written about five years before the death of our poet there is not a single example. In the middle of the verse too Lucretius has many favourite movements, most of which are not unexampled in Virgil Catullus or Cicero but are much less common, such as *Quid nequeat finita potestas, Detulit ex Helicone perenni, Amnibus inveniuntur aperto, Finita variare figurarum ratione, Omne genus perfusa coloribus, Pocula crebra unguenta*, and a hundred such. Cicero has some pretty verses in his prognostica which suggest the manner of Lucretius, *Vos quoque signa videtis, aquai dulcis alumnae, Cum clamore paratis inanis fundere voces, Absurdoque sono fontis et stagna cietis...vocibus instat, Vocibus instat et adsiduas iacit ore querellas*: the latter passage Lucretius v 298 has manifestly imitated. In the fifth and sixth feet of the verse too, so important for the rhythm, the manner of Lucretius is much more like that of Ennius and, in some points, of the Greeks, than that of Virgil or Catullus or even Cicero: he delights to close the verse with such words as *principiorum materiai simplicitate*, or *vis animai, saecla animantum, mente animoque*, and does not even avoid such harsh elisions as *quandoquidem extat, perpetuo aevo, praeterea usquam*. Now in Virgil such endings as *quadrupedantum ancipitemque*, and in Catullus such a one as *egredientem* are exceedingly uncommon. But these poets make one striking exception in favour of Greek words and delight to close a verse with *hymenaeus Deiopea Thersilochumque* and the like: a concession to Greek rhythm and a prettiness which Lucretius would not care for. As for the other rhythms just mentioned, Virgil says

magnam cui mentem animumque and *simul hoc animo hauri*, in acknowledgment probably of his obligations to Lucretius: they produce a striking effect in the Aeneid from their extreme rarity: Lucretius again does not decline spondaic endings as *naturai, aeternumque, et mortalis, sint in motu*; once even *inventi sint*; but these are much rarer than such endings as *principiorum*, and it is worthy of note that he abstains from them altogether in the sixth book. On the contrary Catullus and Virgil use them much more frequently than *quadrupedantum egredientem* and the like: Catullus luxuriates in movements like these *Nereides admirantes, ac moenia Larisaea, fluctus salis adludebant*, and Virgil and Ovid often affect such terminations to a line as *Iovis incrementum, Phrygia agmina circumspexit*; but more in Greek than in Latin words. This however is no concession to ancient practice, but a modern prettiness introduced by the school of Alexandrine imitators mentioned above: see Cicero ad Att. VII 2 1 *ita belle nobis* Flavit ab Epiro lenissimus onchesmites. *hunc σπονδειάζοντα si cui voles τῶν νεωτέρων pro tuo vendita.* Was it scorn of such affectation that made Lucretius altogether avoid such σπονδειάζοντες in his last book? Other forms of spondaic endings, borrowed from the Greek and mostly applied to Greek words, are not uncommon in Catullus Virgil and Ovid. They need not be mentioned here, as they generally have something of learned artifice and recondite elegance about them, quite alien to the nature of Lucretius. He never puts more than two spondees together at the end of the line, while the other three do not reject such rhythms as *Nereidum matri et Neptuno Aegaeo* after the manner of the Greeks. Lucretius does not avoid sometimes very harsh and prosaic endings such as *constare: id ita esse.* When Virgil has such terminations of a verse as *procumbit humi bos*, it is done for effect; Lucretius employs them sometimes for a purpose, oftener without any. He is especially fond of elisions after the fourth foot like these, *perdelirum esse videtur, permutato ordine solo, minus oblato acriter ictu, nisi concilio ante coacto*: in elisions generally he is sometimes less, sometimes more violent than Virgil. One other point is worth observing: Lucretius loves to have the fourth foot wholly contained in one word and ending with that word: in the first 43 verses of his poem, a highly elaborated passage, more than half the number have movements like these, *quae terras frugiferentis*, not *terras quae*; *exortum lumina solis, tibi suavis daedala tellus*, not *suavis tibi*; *tibi rident aequora ponti, diffuso lumine caelum, genitabilis aura favoni* and so on. This produces a grand and stately, but somewhat monotonous effect. Catullus however carries it as far or even farther than Lucretius. Virgil, though he often uses this flow and with much effect, avoids it as a rule: he says *Troiae qui primus*, not *qui Troiae*; *labentem caelo quae ducitis annum*, not *quae caelo*, as Lucretius would have done. It must not be questioned that in the construction of single verses and still more

in the rhythmical movement which he impresses on a whole passage Lucretius is a far less careful and skilled artist than Virgil. The effect which his grandest passages produce is owing more to the vigour and originality of the thought and the force and freshness of the expression than to studied polish and elaboration.

One of the most marked peculiarities of the old Latin writers is their extreme fondness for alliteration, assonance, repetition of the same or similar words syllables and sounds, often brought together and combined in the most complex fashion. In Latin, as in some other languages, this usage was clearly transmitted from most ancient times, and is not the invention of any one writer. Ennius and the serious poets use it to produce a poetical effect; Plautus and the comic poets employ it for comic purposes: the following from the captivi, *Quanta pernis pestis veniet, quanta labes larido, Quanta sumini apsumedo, quanta callo calamitas, Quanta laniis lassitudo, quanta porcinariis*, will furnish a good example. Cicero does not despise such artifices even in prose; but none scatters them about more prodigally than Lucretius both singly and in manifold combination: they are to be counted in his poem by hundreds, nay thousands, and many are noted in different parts of our commentary. His alliterations comprise almost every letter of the alphabet: the more effective letters such as *m p v* pronounced *w* are often used with striking effect. The last sometimes expresses pity as its sound well fits it to do: *Viva videns vivo sepeliri viscera busto*: comp. Virgil's *Neu patriae validas in viscera vertite vires*; and Cicero's *vivus, ut aiunt, est et videns cum victu ac vestitu suo publicatus*: or force or violence, because the words indicating such effects begin many of them with the letter: *vivida vis pervicit, venti vis verberat, ventorum validis viribus, Vel violenta viri vis, quid volnera vellent*: comp. Virgil's *Fit via vi*, Livy's *vi viam faciunt*, Lucilius' *Vis est vita, vides, vis* cet.; Ennius' *vidi Priamo vi vitam evitari*; for effects of living shunning and the like are expressed by it in Lucretius also. Often various letters are used in combination: the following is a good instance of *m p* and *v*: *parare Non potuit, pedibus qui pontum per vada possent Transire et magnos manibus divellere montis Multaque vivendo vitalia vincere saecla*: comp. Ennius' *Marsa manus, Paeligna cohors, Vestina virum vis.* Such combinations are common in Virgil; but occur by hundreds in Lucretius. Then he delights in bringing together words compounded of the same preposition by themselves or in union with other sorts of alliteration or assonance: *officium...officere atque obstare, seiungi seque gregari, disturbans dissoluensque, retroque repulsa reverti, condenso conciliatu, Exos et exanguis, pertusum congesta quasi in vas Commoda perfluxere atque ingrata interiere*: comp. Virgil's *Insontem infando indicio* and the like. Then he loves to bring together the same or like-sounding words or examples of oxymoron in conjunction with other alliterations and assonances or by themselves: *omnes omnia*,

omnibus omnino; *tempore in omni omnibus ornatum rebus*; again and again *Multa modis multis multarum rerum*; *pueri circum puerum*; *Nil sint ad summam summai totius omnem*; *Tactus enim tactus*; *aurea dicta, Aurea*; *sonitu sonanti, penitus penetrare, funditus fundamenti*; *casta inceste, Innumerabilem enim numerum, Innumero numero, Immortalia mortali, Mortalem vitam mors cum inmortalis ademit*; *tempore iniquo aequo animo*: cet. cet. Virgil's fondness for similar artifices is probably in great measure derived from Lucretius. After Virgil's time they appear to be less frequent in Latin literature: people probably got tired of them, as has happened in other literatures. This love of assonance in all its shapes our poet indulges to such an extent, that his ear and taste appear not unfrequently to have become blunted by satiety: often within the compass of two or three lines he will use some of his favourite words, such as *res ratio* or *corpora*, three or four or five times, without there being any point or force whatever in their repetition. The most glaring examples are pointed out in their places. Many other modes of producing effect might be noted in Lucretius, such as his habit of putting together substantives without any copula: *Prata lacus rivos segetes*; *Ossa cruor venae calor umor viscera nervi*; *Aera solem ignem terras animalia frugis*; *varios conexus pondera plagas Concursus motus*; *Concursus motus ordo positura figurae*; *Volneribus clamore fuga terrore tumultu*: but let the examples given suffice. In his alliterations and assonances as well as in the rhythmical movements of his verse and the style and colour generally which he imparts to his poem Lucretius seeks rather for the most direct and obvious means of producing effect, than for the more subtle and recondite arts of Virgil. His ornament therefore is apt sometimes to be in excess, sometimes to be deficient; yet even the plainest and most prosaic parts of his poem shew a sincerity of thought, a force of reasoning and a racy idiomatic flavour of style which render them less dull and uninteresting than the flatter portions of many more carefully elaborated works.

Another point of resemblance between Lucretius and the older writers must not be passed over unnoticed. The language seems once to have claimed for itself, and with good reason, the same right of forming compound words, as the Greek always retained. Thus in Lucretius alone there are forty or fifty compounds like *terriloquus horrisonus* or *terrigena Troiugena* cet., many of them ἅπαξ λεγόμενα, such as *silvifragus fluctifragus*. Now these words are just as regularly and organically formed as any in Greek: *primigenus* seems as legitimate as πρωτόγονος, *terrigena* as γηγενής. But by one of those mysterious laws of language which have to be observed and not reasoned about, the classical language soon began to limit this right of forming compounds, and Lucretius in this respect too must be pronounced decidedly archaic. Virgil is already much more niggardly in his use of compound words; and the tendency of the language was more and more to discard them, until barbarous writers like Tertullian forced it back in the opposite direction. Lucretius in VI 129 uses *perterricrepus*: this word Cicero in one of his latest works the orator, 164, quotes from an old poet and condemns for 'asperitas', as well as *versutiloquus*. Now these two adjectives are formed quite regularly; and so are the *repandirostrum incurvicervicum* of Pacuvius; but Quintilian, who in his instit. I 6 65—70 states the limits within which the Latin of his day might form compounds, observes 'cum κυρταύχενα mirati sumus, *incurvicervicum* vix a risu defendimus'. See also Livy quoted in n. to V 839. The right of forming compound nouns and verbs by prefixing the different prepositions always remained in full force; and no one having his attention called to this point can read a page of Cicero or Livy without feeling what an influence over style and expression this usage of the language exercised, an influence almost equally apparent in any page of an English or French writer.

Standing as Lucretius did entirely aloof from what would most excite the sympathies of his contemporaries, there is not much evidence to shew what reception his poem met with from the great mass of his countrymen. It sufficiently appears however that he and Catullus were justly esteemed the two greatest poets of their age. Yet there can be no doubt that his work came into the world at a time very unfavourable for the fame of its author. He would take no part in the great movement then in active progress which ended in producing the works of Virgil Horace and Ovid and fixed once and for ever the Roman standard of poetical taste. The splendour of their reputation threw into the shade that of their greatest predecessors, Ennius Lucretius and even Catullus: they obtained the unanimous suffrages of the best critics of the empire, at the head of whom stood Quintilian. The reaction in favour of the older literature seems to have been headed by unskilful and too zealous leaders and thus to have exposed itself to the shafts of satire. The effect which Dryden and Pope produced for some generations on English poetry gives but a faint notion of the sovereignty exercised by the Augustan poets. And yet Lucretius had no slight influence on the poetry of succeeding ages, although the first mention of his verses according to the interpretation usually given is anything but complimentary. I refer of course to a sentence of Cicero written a few months after the poet's death and probably at the very time when his poem was first published. At the end of a short letter to his brother Quintus, II 11, written early in 700, occurs this sentence as it is given in all mss. *Lucretii poemata ut scribis ita sunt multis luminibus ingenii multae tamen artis.* Nearly all editors are now agreed in writing *ita sunt, non multis* cet.; but sense alone must determine the right reading: to put *non* before *multae tamen artis* is quite as easy an emendation. What then is

Cicero's meaning? we have not the criticism of Quintus which called forth the remark to enlighten us. At this period when the *νεώτεροι*, as Cicero calls them, were striving to bring the Alexandrine style into fashion, there seems to have been almost a formal antithesis between the rude genius of Ennius and the modern art. It is not then impossible that Quintus may so have expressed himself on this head, that Cicero may mean to answer 'yes, you are quite right in saying that Lucretius has not only much of the native genius of Ennius, but also much of that art which to judge by most of the poets of the day might seem incompatible with it'. Thus the mss. would be right and Cicero's judgment would satisfy us. Again to write either *multae tamen etiam artis* or *multae etiam artis* is hardly, if at all a greater change than to insert *non*. Lachmann however has no doubt that *non* must come before *multis*: he says Cicero could not deny to Lucretius art: 'quod in Marco sane mirandum esset, quippe qui eius artis qua Lucretius pollet ne minimam quidem partem in carminibus suis adsecutus esset. contra idem cur pauca *ingenii lumina* in Lucretii carmine animadverterit, non potest obscurum esse: nam ei Ennius et Attius ea re *ingeniosi* videbantur, quod oblectando docerent et animis movendis corrigerent mores'. But every one feels that *ingenii lumina* means here precisely what we mean by genius; what Ovid means when he says of Ennius *Ennius ingenio maximus, arte rudis*, of Callimachus *Quamvis ingenio non valet, arte valet*, of himself broken by calamity *Nec tamen ingenium nobis respondet, ut ante...Impetus ille sacer qui vatum pectora nutrit, Qui prius in nobis esse solebat, abest*; what Horace means by *ingeni benigna vena*; and *Ingenium cui sit, cui mens divinior*; what Juvenal means when he says of Demosthenes and Cicero *utrumque Largus et exundans leto dedit ingenii fons*. As it would not be well then in Cicero to deny Lucretius *ingenium*, if we must have a *non*, I should prefer to see it before *multae*. Why Cicero should deny him art, may be explained in more ways than one: he had a genuine love of Ennius and is indignant that the 'cantores Euphorionis' should presume to despise him: he and Lucretius agreed on taking him for their great poetical model. At the same time his own Aratea must have been written thirty years or more before this letter, and he may well have been so far converted by the almost unanimous tendency of the poets of the day towards that style of diction and verse which was gradually leading up to the works of Virgil and Horace, as to deny Ennius and Lucretius much art. In that early work for instance Cicero suppresses the final *s* of short syllables just as freely as Lucretius does: in his orator written two or three years before his death he says of this licence 'iam subrusticum videtur, olim autem politius'. What remains of their poetry, proves that both Augustus and Maecenas had formed their style rather in the school of Catullus and Calvus than of Virgil and Horace; yet doubtless they would have rated the art of the latter more highly than that of the former. Or Quintus may have dwelt on Lucretius' philosophical qualities; and Cicero who is continually jeering at Epicurus for his want of art and scientific discipline, may possibly include Lucretius in the same condemnation. However that may be, if Cicero did deny him *ingenium*, then did the great Roman orator display less taste than the orator and philosopher of Arles Favorinus two centuries later when, as Gellius I 21 records, he spoke of Lucretius as *poetae ingenio et facundia praecellentis*.—But I cannot help suggesting, what I have long suspected, that the corruption does not lie in the words cited above, but in those which follow. The short letter thus concludes according to the mss.: Lucretii poemata ut scribis ita sunt multis luminibus ingenii multae tamen artis sed cum veneris virum te putabo si Salustii Empedoclea legeris hominem non putabo. The sentence seems to me clearly to require something to be joined with *virum te putabo*, in order to contrast with *si Salustii* cet.: this now would be a very easy correction, Lucretii poemata, ut scribis, ita sunt, multis luminibus ingenii: multae tamen artis *es*se cum *in*veneris, virum te putabo; si Salustii Empedoclea legeris, hominem non putabo: it is manifest how easily the *es* of *esse* might be absorbed in the *is* of *artis*; the *in* of *inveneris* in the *m* of *cum*. Marcus would then mean to say: on a first perusal you have rightly seen that there is much genius in the poem of Lucretius. If when you have had time to study him, you discover much of art as well, I shall think you a right worthy man; if you can get to the end of Sallust's Empedoclea, I shall not think you a human being at all. This would give the proper antithesis between *vir* and *homo*; and would strengthen the probability that Marcus was editor. Bergk conjectures that some words have fallen out and that we are to read: Lucretii poemata ut scribis ita sunt: multis luminibus ingenii, *non* multae tamen artis. sed *si ad umbilic*um veneris, virum te putabo; si cet. This has found favour with many; but I cannot approve of it. Whichever of the two was editor, it would have been preposterous in the one to address the other in this way; and how could Quintus have written in such terms without having read the poem, a poem after all of 7000 verses?

Catullus, though it was published so short a time, scarcely a year perhaps, before his death must I think have known it, when he wrote his marriage of Peleus and Thetis, as he has there imitated it in more places than one; from which I infer that this poem of Catullus was one of his latest: on this point compare the passages brought together in the note to III 57. When the nature of things was published, Virgil was fifteen years of age. At such an age therefore the style and manner of Lucretius were able to impress themselves fully on the younger poet's susceptible mind; and perhaps the highest eulogy which has ever been passed on the former is that constant imitation of his language and thought which pervades Virgil's works from one end to the other.

Horace too and Ovid had carefully studied him: this commentary will in some degree shew what they as well as Manilius owe to him, though this last disciple is not worth much. Lucretius thus exercised indirectly no slight influence on the whole future career of Latin poetry. To pass to modern times, the Italian scholars of the fifteenth century, full of enthusiasm for everything classical, yet admired no Latin poet more than Lucretius, Virgil alone excepted. The illustrious French scholars of the sixteenth century, Lambinus Turnebus Scaliger, pronounced him one of the greatest, if not the greatest of Roman poets. In the seventeenth, the century of English erudition, he was of course well known to Milton and has been often imitated by him in the Paradise Lost: he had the fortune too to be entirely translated by one of the most accomplished cavalier gentlemen and by the most accomplished of puritan ladies before Dryden and Creech turned their thoughts to the same task. In more recent times he has been perhaps less praised and read; yet in France he has never been without enthusiastic admirers: it will be enough to specify Voltaire in the last century; Villemain, Sainte-Beuve and Martha in the present. Among Germans Goethe never failed in sympathy and admiration for Lucretius. In this country the most recent account of the philosophy and poetry of Lucretius is at the same time the fullest and most favourable and by far the best: I speak of that given by Professor Sellar in the Roman poets of the republic.

BOOK I

1—43: the poet calls upon Venus, as mother of the Romans, author of their being to all living creatures and sole mistress of nature, to help him in writing on that theme; but first to constrain her lover Mars, the lord of war, to grant peace to the Romans in order that he himself might have ease of mind to write, and his friend Memmius leisure to read what he wrote.

1 *Aen. genetrix*: her peculiar relation to the children of Aeneas is placed in vivid contrast with that which she bears to the whole of animate and inanimate nature. Lucr. may have had in his mind Ennius ann. 53 *Venus et genetrix patris nostri*. Ovid without doubt refers to Lucr. both in trist. II 261 *Sumpserit, Aeneadum genetrix ubi prima: requiret, Aeneadum genetrix unde sit alma Venus*, and fasti IV 90 foll. where the whole of our passage is brought under contribution: comp. too Auson. epigr. 33 *Aeneadum genetrix hic habito alma Venus*, [and Ephem. Epigraph. vol. II p. 265 (in a poetical dedication to Venus Erycina by Apronius filius) *Aeneadum alma parens.*] *genetrix*

AB rightly: so all the best mss. of Virgil and others, and certainly most inscriptions of the best ages: some of those which have *genitrix* are now declared spurious; some I doubt not have been wrongly copied. *Aeneadum genetrix* is scribbled on the outer wall of the basilica of Pompeii: corp. inscr. IV 3072. Lamb. compares *meretrix meritus* with *genetrix genitus*: Lach. adds *genetivus* and *obstetrix institor*, and attributes the *e* to the following long *i*. It may be said that *meretrix* is from a verb of the 2nd conj. and that *mereto* is repeatedly found in old inscriptions; that *meritus* therefore, not *meretrix*, has changed its vowel; that *obstetrix* too is intermediate between *stator* and *institor*: comp. *recĕpit accĕdere* and the like. This is true: but authority calls imperiously for *genetrix*, and *genetus genetor* may once have been in use: see the index of the new corpus inscr. Lat. vol. I for numerous cases of *e* for *i* in the old language. *hom. div. vol.*: VI 94 *Calliope, requies hominum divomque voluptas.*

2 *Alma*, an epithet he applies elsewhere to water, the earth, a nurse, pleasure, Pallas; but here it has manifestly a peculiar force with reference to all that follows in this fine address in which no word is thrown away. *alma Venus* was not only familiar to poets, but seems to have passed into the language of the people. I find on the basis Capitolina reg. XII an *almae Veneris vicus*; and the cosmographia Aethici p. 716 ed. A. Gronovius says of the island between Portus and Ostia *ita autem vernali tempore rosa vel ceteris floribus adimpletur ut prae nimietate sui odoris et floris insula ipsa libanus almae Veneris nuncupetur.* Macrob. sat. III 8 3 *Laevius etiam sic ait* Venerem igitur almum adorans, Seu femina isve mas est, Ita ut alma Noctiluca est. Plautus rudens 694 has *Venus alma*; Apul. metam. IV 30 the goddess in wrath says of herself *en rerum naturae prisca parens, en elementorum origo initialis, en orbis totius alma Venus.* Empedocles termed her ζείδωρος: see Plutarch amat. p. 756 E.

2 3 and **6—9**: thus early the poet calls attention to the three great divisions of the world, to which he as well as other writers before and after him so constantly revert that the thing passed into a common proverb: *mare terra caelum di vostram fidem*, says Plaut. trin. 1070; *Ita mihi videntur omnia, mare terra caelum, consequi Iam ut opprimar*, Amph. 1055; *ut nulla pars caelo mari terra, ut poetice loquar, praetermissa sit*, says Cic. de fin. V 9. Ovid fasti IV 93 thus imitates Lucr. *Iuraque dat caelo terrae natalibus undis Perque suos initus continet omne genus.* Bentl. points out that Lucr. has himself imitated Eurip. Hipp. 449 φοιτᾷ δ' ἀν' αἰθέρ', ἔστι δ' ἐν θαλασσίῳ κλύδωνι Κύπρις, πάντα δ' ἐκ ταύτης ἔφυ, and 1261 Ποτᾶται δ' ἐπὶ γαῖαν εὐάχητόν θ' Ἁλμυρὸν ἐπὶ πόντον. Θέλγει δ' Ἔρως, ᾧ μαινομένᾳ κραδίᾳ πτανὸς ἐφορμάσῃ Χρυσοφάης, φύσιν Ὀρεσκόων σκυλάκων Πελαγίων θ' ὅσα τε γᾶ τρέφει, Τὰν ἅλιος αἰθομέναν δέρκεται, Ἄνδρας τε· συμπάντων δὲ Βασιληίδα τιμάν, Κύπρι, Τῶνδε μόνα

κρατύνεις: the last clause is parallel with 21 *Quae quoniam* etc. But both Eurip. and Lucr. seem indebted to the Homeric hymn IV 1 Ἀφροδίτης Κύπριδος ἥτε θεοῖσιν ἐπὶ γλυκὺν ἵμερον ὦρσε Καί τ᾽ ἐδαμάσσατο φῦλα καταθνητῶν ἀνθρώπων Οἰωνούς τε διιπέτεας καὶ θηρία πάντα Ἠμὲν ὅσ᾽ ἤπειρος πολλὰ τρέφει ἠδ᾽ ὅσα πόντος: the orphic hymn LV 4 follows in the same track, Πάντα γὰρ ἐκ σέθεν ἐστὶν ὑπεζεύξω δέ τε κόσμον· Καὶ κρατέεις τρισσῶν μοιρῶν, γεννᾷς δὲ τὰ πάντα Ὅσσα τ᾽ ἐν οὐρανῷ ἐστὶ καὶ ἐν γαίῃ πολυκάρπῳ Ἔν πόντου τε βυθῷ. 2 *cael. lab. sig.*: Aen. III 515 *Sidera...tacito labentia caelo*; Ovid fasti III 113 *caelo labentia signa. labentia* well describes the smooth easy motion 'ohne Hast doch ohne Rast': so IV 444 *signa videntur Labier adversum nimbos.* Cic. Arat. fragm. 3 said before Lucr. *Cetera labuntur celeri caelestia motu*: Lucr. had attentively studied this translation, as we have said above and shall often have occasion to repeat. 3 *terras*: Lucr. when speaking of the earth as an extended surface or a solid mass uses the plur. of the accus. and abl. oftener than the sing., the gen. not unfrequently, the nomin. and dat. only once each I think, II 1109 and V 630. *frugiferentis* appears to be a ἅπαξ λεγόμενον. 4 *Concelebras* rightly explained by Wak. 'uno tempore frequentas, permeas': its first meaning seems to be that of a multitude filling, crowding a place, as II 344 *variae volucres laetantia quae loca aquarum Concelebrant...Et quae pervolgant nemora avia pervolitantes*, where *Concelebrant* and *pervolgant* might clearly change places: comp. also Cic. de imp. Cn. Pomp. 61 *At eam quoque rem populus Romanus non modo vidit, sed omnium etiam studio visendam et concelebrandam putavit*: the goddess therefore fills at once with her presence, *pervolgat*, earth and sea, and thus performs the part of a multitude: this sense is therefore more poetical than, and also implies, that of peopling. 5 *lumina solis*: in the nom. and acc. the plur. is much oftener used than the sing. by Lucr. to express the φάος ἠελίοιο: it occurs more than once in Ovid. 6 *Te*, after the vocatives and relatives of the first five vss., follows as in Hor. od. I 35 4; Catull. 2 9: but there 7 and 8 should be transposed and we should read *Credo ut, cum gravis acquiescet ardor*, Sit *solaciolum sui doloris.* *te...Adventumque tuum*: 12 *te...tuumque initum*: this form of expression is singularly stately. 7 *daedala* well explained in Paulus Festi p. 68: *daedalam a varietate rerum artificiorumque dictam esse apud Lucretium terram, apud Ennium Minervam, apud Virgilium Circen, facile est intellegere, cum Graece* δαιδάλλειν *significet variare.* Lucr. applies it also to nature and to the tongue, followed by a gen.; and in a pass. sense to poems and to statues. 8 *Summittit* a favourite word of Lucr. in this signification. *rident* here, as II 559 *ridet placidi pellacia ponti* and V 1005 *ridentibus undis*, has simply the sense of *nitet diffuso lumine* in 9, and *rident* in III 22: there seems to be no reference to that plashing ringing ripple so often seen on Greek and Italian seas in spring which

Aeschylus expresses by γέλασμα, and Aristot. probl. XXIII 1 and 24 by ἐπιγελᾶν: that is implied in the *cachinni* and *cachinnat* of Catullus and Accius. 9 *Placatumque*: VI 48 *Ventorum ex ira ut placentur*; so Virg. *tumida aequora placat* and *placataque venti Dant maria*, the opposite of Horace's *iratum mare*.

10 *Nam* cet. a poet's logic: he assumes the sunshine and the spring to follow on the advent of Venus, because when they do come, all living things turn to thoughts of love: *It ver et Venus et Veneris praenuntius ante Pennatus graditur. species verna diei* i.e. *species veris*: comp. 119 *Per gentis Italas hominum*, and n. to I 474; and IV 733 *Cerbereasque canum facies*: it means that aspect of day which belongs to spring: IV 137 *mundi speciem violare serenam.* 11 *reserata*: the *sera* being removed from the door of its prison. Ovid fasti II 453 *et sex reserata diebus Carceris Aeolii ianua laxa patet. genitabilis* used this once by Lucr. and with the active sense in which *genitalis* is so often employed by him. Varro de ling. Lat. V 17 *Aetheris et terrae genitabile quaerere tempus*, which is rightly given to Lucilius though the mss. assign it to Lucr.: the word is also used actively by Avienus and Arnobius. VI 805 *mactabilis* is *qui mactat*: so Virg. *penetrabile telum* and *frigus*; Ovid *penetrabile telum* and *fulmen*=quod penetrat, in which sense Lucr. more than once has *penetralis*; in Horace *dissociabilis*=qui dissociat, in Plautus *impetrabilis*=qui impetrat, in Plautus Cicero Livy Ovid Tacitus and Suetonius *exitiabilis=exitialis*; in Livy and Tacitus *permitiabilis=permitialis*; in Terence *placabilius est* twice=aptius ad placandum, in Persius *reparabilis*=qui reparat, in Ovid *resonabilis*=qui resonat: Val. Flaccus I 782 *exorabile carmen*: comp. in Horace *illacrimabilem Plutona* with *illacrimabiles urgentur. terribilis*=qui terret, *horribilis*=qui horretur. With *gen. aura fav.* comp. Catul. 64 282 *aura tepidi fecunda favoni*, and Pliny nat. hist. XVI 93 *Hic est genitalis spiritus mundi a fovendo dictus, ut quidam existimavere.* 12 *Aeriae*: V 825 *Aeriasque simul volucres*; Manil. I 237 *Aeriaeque colunt volucres*; Calpurn. XI 28 *Et genus aerium volucres. primum*: Virg. geor. II 328 and Ov. fasti IV 99 and Chaucer at beg. of Canterbury tales all make the birds first feel the coming of spring: 'So priketh hem nature in hir corages'. 13 *perculsae* is literally 'knocked down, struck to the ground': see Forcellinus and Bentl. to Hor. epod. 11 2: hence often 'stunned, smitten through all the frame' by a strong passion, as here by love, 261 by the rapture of a gratified craving: comp. Plaut. trin. 242 *Nam qui amat, quod amat, quom extemplo eius saviis perculsus est*, where *perculsus* is restored from the Ambrosian, the other mss. having *percussus*, with which it is so often confused.

14 *ferae pecudes* for *ferae* seems very doubtful: *pecudes* to be sure is often used by the poets for animals generally, by Lucr. and others for

shoals of fish; yet I find in no classical writer *ferae pecudes* for *ferae*; but again and again in Lucr. and others *pecudes* and *ferae* in formal contrast. Wak. misquotes Martial, and besides him only quotes or misquotes such writers as Hilary and Tertullian to support *ferae pec.*: Forbiger refers to Varro de re rust. II 1 5 and Colum. IX 1, passages which make strongly against him: by *pecudes ferae* Varro means tame animals or *pecudes* found in a wild state, viz. sheep goats swine bulls asses horses; Columella goats deer boars, which though wild may yet be kept in herds on an estate. Again *ferae* is awkward, as tame beasts are as much moved as wild: Ovid, fasti IV, where he is imitating Lucr. speaks of tame brutes only; Virg. geor. III 242 foll. of both tame and wild, and it is of mares he says *flumina tranant.* Can *ferae pec.* mean brutes made headstrong by passion? comp. Cat. 61 56 *Tu fero iuveni in manus Floridam ipse puellulam Dedis*: much as Plaut. trin. 750 *adulescenti...Indomito, pleno amoris ac licentiae*: otherwise *fere* seems highly prob. 'generally', 'without exception': so II 370 *Ad sua quisque fere decurrunt ubera lactis*; and 218 *incerto tempore ferme* 'at quite an uncertain time', and III 65 *Turpis enim ferme contemptus* 'without exception', V 242 *Haec eadem ferme mortalia cernimus esse*: comp. Virg. Aen. III 135 *Iamque fere sicco subductae litore puppes*, where I do not understand the doubts of editors: Livy XLI 3 4 *cetera deformis turba... praeda fere futura, si belli hostes meminissent.* Yet Statius silv. I 2 184 makes *alma Venus* say *Alituum pecudumque mihi durique ferarum Non renuere greges* cet. *pab. laeta*: here again, as throughout this address, the epithet is at once poetical and idiomatic: *pab. laet.* occurs 6 or 7 times with *armenta, arbusta, vineta*: thus Virg. *laetas segetes* and the like. But it was also a word of the people: see Cato and Varro in Forcell. and comp. Cic. de orat. III 155 *laetas segetes etiam rustici dicunt*: and orator 81 where he repeats the same: Livy too I 7 4 has *pabulo laeto*, XXIV 3 4 *laeta pascua*; Manil. III 654 imitates Lucr. *Tunc pecudum volucrumque genus per pabula laeta In Venerem partumque ruunt.*

15 *ita capta...Te sequitur...quo quamque ind. per.*=*ita quaeque capta ...Te s. quo*; or *quo quamque ind. per., te sequitur*: such constructions are not uncommon in Lucr.: 170 *Inde enascitur atque oras in luminis exit, Materies ubi inest cuiusque*=quicque enasc....inde ubi eius mat. inest. Not unlike is V 1110 *divisere atque dedere Pro facie cuiusque* =cuique pro facie eius: like in principle are I 152 *Quod multa in terris fieri caeloque tuentur Quorum operum causas nulla ratione videre Possunt*; 289 *ruit, qua quicquid fluctibus obstat*; 695 *Unde hic cognitus est ipsi quem nominat ignem*; III 133 *et in illam Transtulerunt, proprio quae tum res nomine egebat*; VI 313 *ex illa quae tum res excipit ictum*; 896 *scatere illa foras, in stuppam semina quae cum conveniunt* cet.: with these comp. Hor. sat. I 4 2 *Atque alii quorum comoedia prisca virorum est*; 10 16 *Illi, scripta quibus comoedia prisca viris est*; epod. 2 37

malarum quas amor curas habet; [Ovid fasti VI 395, amended by Madv. advers. II p. 108, and Livy there cited by him:] Juv. III 91 *Ille sonat, quo mordetur gallina marito*: again IV 560 *neque illam Internoscere verborum sententia quae sit*; II 1143 *Iure igitur pereunt, cum rarefacta fluendo Sunt et cum externis succumbunt omnia plagis*=omnia pereunt cum cet.; III 391 *Usque adeo prius est in nobis multa ciendum, Quam primordia sentiscant* cet.; 836 *In dubioque fuere utrorum ad regna cadendum Omnibus humanis esset*=In d. fuere humani utrorum cet.; IV 50 *Quoi quasi membranae, vel cortex nominitandast, Quod speciem ac formam similem gerit eius imago*; V 853 *habere* cet.=habere utrumque Mutua qui cet.; VI 266 *Nec tanto possent venientes opprimere imbri... Si non extructis foret alte nubibus aether*: i.e. venientes nubes cet.: 503 *Concipiunt*, i.e. nubila...*Cum supera magnum mare venti nubila portant*; II 91 *neque habere ubi corpora prima Consistant*=habere corpora ubi: quite similar is Ov. trist. III 5 53, causelessly tampered with by editors, *Spes igitur superest facturum ut molliat ipse...poenam*=facturum ipsum ut molliat. IV 387 *Qua vehimur navi fertur* is more usual and like Liv. I 1 3 *ei in quem primum egressi sunt locum, Troia vocatur*: a constr. not uncommon in the best authors: comp. also IV 397 *Exstantisque procul* cet. and n. there; and II 22 foll. and n. there.

17 *Denique*, not in the sense it usually bears in Lucr. as a synonyme of *praeterea, porro*, 'again' 'once more', introducing a new argument: here it places the sentence in apposition with what precedes, summing up and serving as a climax to what has been said: yes, in short, to sum up all, you inspire love throughout the world and every portion of the world. Comp. Ov. heroid. I 1 21 *Denique quisquis erat castris iugulatus Achivis*; 4 84 *Denique nostra iuvat lumina quidquid agis.* Terence is fond of this use: comp. eun. 40 *denique Nullum est iam dictum quod non sit dictum prius*; heaut. 69 *denique Nullum remittis tempus neque te respicis*, where Cicero de fin. I 3 inadvertently joins *denique* with what precedes: [I see that Umpfenbach reads Terence as Cicero does, yet surely not rightly. So, I think, Cic. epist. (Caelius) VIII 6 2 *denique invidiosum tibi sit, si emanarit*: 'yes' is the meaning here, but the editors alter the word or note it as corrupt. So too Caes. b. Gall. VII 28 5 *denique ex omni numero*, summing up what precedes exactly as in Lucr.] But in Lucr. himself I 464 *Denique Tyndaridem* cet. and 471 *Denique materies si rerum* cet. the word has much the same force, introducing merely a confirmation of what precedes. Cicero and the best writers often use it with this force in the same sentence with what it sums up, as in the clause four times repeated by Lucr. *finita potestas denique cuique Quanam sit ratione*: here *denique* does not, as it so often does, merely add an item in the enumeration, but defines more fully what precedes. The word means here much what *adeo* does in Virgil's imitation, geor. III 242. *rapacis* is well explained by Ovid met. VIII 550

nec te committe rapacibus undis: Ferre trabes solidas obliquaque volvere magno Murmure saxa solent. vidi contermina ripae Cum gregibus stabula alta trahi: Virgil also applies it to rivers, Seneca to a torrent, Ennius (?) ann. 303, Ovid, Seneca to a sea-current; [comp. also Sen. Thy. 477 Siculi rapax...aestus unda.] 18 Virg. geor. II 209 *Antiquasque domos avium.* 19 *incutiens* more usually applied to fear or some other bad passion; but 924 to love as here: comp. too Hor. epist. I 14 22 *Incutiunt urbis desiderium*; though there perhaps it is satirical: Livy XXIX 22 4 *tantaque admiratio incussa.* 20 *generatim* 'kind by kind': of adverbs in *-tim* or *-sim* generally with this force there are from twenty to thirty in Lucr. Bopp vergl. gram. III 243 points out that they are adverbial accusatives of lost abstract substantives: *tractim* prop. 'with drawing', *cursim* 'with running', *caesim* 'with cutting', *confertim* 'with massing together': see too Corssen Lat. Formenl. p. 281 foll. who enumerates more than 200 of them. *saecla* found in Lucr. only in the contracted form, and used by him some forty times in this sense of races, generations of living creatures, men, wild beasts, even inanimate things, as II 1113: a sense peculiar to him with the exception of a few imitators: he has it perhaps only once, III 1090, or at most 3 times, see I 202 and III 948, in its ordinary meaning; and those 3 cases may be looked upon as almost the same phrase. *propagent* a very expressive metaphor recurring not unfrequently.

21 *rer. nat.*: see n. to 25. 22 23 *quicquam* so AB always with the best mss. and inscriptions; also *quicque* and *quicquid* in the sense of *quicque*; but usually *quidquid* as a relative: see Lach. to V 264. *dias*: can Lucr. by this word mean either 'bright' or 'open' according to all its analogies in Latin Greek and as we are told Sanscrit? Pontanus ap. Victor says 'dias i. lucidas'. Lucr. uses the word only twice after this, II 172 *dia voluptas* and V 1387 *pastorum...otia dia*: in the former place the meaning 'bright' would be suitable; in the latter that of 'in the open air': comp. Varro de ling. Lat. V 66 'hoc idem magis ostendit antiquius Iovis nomen; nam olim Diovis et Dispiter dictus, id est dies pater. a quo dei dicti qui inde, et dies et divum. unde sub divo dius Fidius', and so on: also VII 34 he quotes from Pacuvius (?) *Caelitum camilla, expectata advenis, salve hospita*, and after explaining *camillus* and *camilla* continues 'hinc casmilus nominatur Samothrece mysteriis *dius* quidam administer dis magnis': then too surely the name of the mysterious *dea dia*, who had her attendant *camilli*, whether she were *Tellus*, *Ceres*, *Ops*, *Flora*, *Fauna* or *Diana*, or all or none, had some connexion with the bright open air; so also that of *Diana*. Virgil uses the word only once, XI 657 *dia Camilla*, who 543 is also *Casmilla* and consecrated to Diana. *luminis oras*, a favourite phrase by which he seems to denote the line or border which divides light from darkness, being from non-being; for he almost always uses *orae* in its proper sense, that

of an edge or coast or limiting line. The phrase is found twice in the annals of Ennius; twice in Virgil, once in Valerius Flaccus, [and in Arnob. II 69 *oras contingeret luminis*]: Lucr. has also *aetheris, terrarum, Acheruntis oras.* 24 *scribendis versibus* are of course datives: comp. geor. I 3 *habendo pecori*, and see Madvig emend. Liv. to IX 9 where he properly reads *vilia haec capita luendae sponsioni feramus*: 'dativo gerundivi in consilio significando admodum libere Livius utitur, ut I 24 *me gerendo bello ducem creavere*, III 5 *his avertendis terroribus in triduum feriae indictae*, IX 26 14 *dictatorem deligere exercendis quaestionibus*, et id genus alia': comp. too IV 43 10 *non ducem scribendo exercitui esse.*

25 *de rerum natura*: this title he doubtless gave to his poem in imitation of Epicurus' great work περὶ φύσεως in 37 books, of which some miserable and ill-deciphered fragments are published in the volumina Herculanensia. The same title was given by Empedocles to his chief poem in 3 books, which must in some degree have served Lucr. for a model. [Thus Galen says de elem. sec. Hipp. I 9 τὰ γὰρ τῶν παλαιῶν ἅπαντα περὶ φύσεως ἐπιγέγραπται, τὰ Μελίσσου, τὰ Παρμενίδου, τὰ Ἐμπεδοκλέους, Ἀλκμαίωνός τε καὶ Γοργίου καὶ Προδίκου καὶ τῶν ἄλλων ἁπάντων.] Macrobius sat. VI 5, § 2 and § 12, twice quotes Egnatius de rerum natura: he preceded Virgil who imitates him, and can scarcely have been later than Lucr. as he elides the final *s*. What he means by *rerum natura* will sufficiently appear in the course of the poem: they are two of four words, *corpus* and *ratio* being the other two, which occur with such curious frequency. Perhaps every one of the many meanings which *natura* has in Cicero or *nature* in English is found in Lucr. Sometimes it is an active force or agency, sometimes an inert mass; sometimes an abstract term; sometimes, as I 419, it seems synonymous with the *omne*. *Res* has with him many abstract meanings; but as a physical term it signifies composite things in being in contradistinction to the *primordia* or *corpora prima* out of which things are made: I 420, 449, 504 are apparent rather than real exceptions: *natura rerum* is therefore coextensive with the *summa rerum*, comprehending the infinity of worlds in being throughout the *omne*, and denoting sometimes this *summa* itself, sometimes that universally pervading agency by which the *summa* goes on. IV 385 *naturam noscere rerum* = causas cognoscere rerum, *natura* often meaning the inner nature and essence of things. '*pangere* figere, unde plantae *pangi* dicuntur, cum in terram demittuntur; inde etiam versus *pangi* vel *figi* in cera dicuntur' Paulus Festi p. 212: comp. Colum. X 251 *ceu littera...Pangitur in cera docti mucrone magistri*: but Cicero, ad Att. II 6 2, 14 2, uses the word in speaking of his own prose. 26 *Memmiadae* a hybrid word formed on the analogy of, though more regularly than *Scipiadas*, which latter word Lucr. Virgil and Horace have all borrowed from Lucilius, unless Ennius employed it

before him: *Tuscolidarum* and *Apulidae* are found in Lucilius, and *Luciliadus* (?): *Romulidae* is common enough: L. Mueller de re metr. p. 389 gives a list of seven such formations from late writers: and he observes that *Daunias* in Horace and *Appias* in Ovid are not dissimilar. 27 Od. δ 725 Παντοίῃς ἀρετῇσι κεκασμένον ἐν Δαναοῖσι: Cic. epist. III 10 10 *quibus ille me rebus non ornatum voluit amplissime ?*, and pro Cornel. frag. 2 *Q. Metelli adulescentia ad summam laudem omnibus rebus ornata*: *excellere* being much the same as *ad summam laudem*; de imp. Cn. Pomp. 20 *maximas Mithridatis copias omnibus rebus ornatas atque instructas fuisse.*

29 and 32 *moenera*: this antique form Lucr. uses three times, as well as *moerorum* twice, and *poeniceus* and *poenibat*: see also n. to II 830 *poeniceus*. *moen. mil.* and *belli moen.*: V 1308 *in munere belli*. *militiai*: Lucr. employs this old form of the gen. very often in the case of substantives, more rarely in that of adjectives: see n. to II 52: a dat. in *-ai* is quite unknown to him. 30 *sopita*: Paterc. II 89 *sopitus ubique armorum furor*; 125 *haec omnia...sopiit ac sustulit.* 31 *tranq. pace*: even in prose, Livy XXVI 26 11 *qui vel in pace tranquilla bellum excitare possent.* 32 *Mav. Arm.*: Aen. IX 717 *Mars armipotens.* 33 *in gr. se Rei.*: Ter. Andr. 135 *Tum illa, ut consuetum facile amorem cerneres, Reiecit se in eum.* 34 *Reicit* or *reiĕcit*, never *reiicit*; and so of the other compounds of *iacio*: these are the only spellings known in the best ages. *aet. dev. vuln. am.*: V 1321 *volnere victos* literally: Virg. Aen. VIII 394 varies the phrase: *aeterno fatur devinctus amore.* *vulnus* and cognate metaphors are frequently applied to love in IV. 35 *Atque ita susp.*: Ov. met. III 22 *Atque ita respiciens.* *ter. cer. rep.*: Cic. Arat. frag. VIII has *tereti cervice reflexum* of Draco's head: Aen. VIII 633 *tereti cervice reflexam* of the she-wolf: Ov. met. X 558 of Venus *Inque sinu iuvenis posita cervice reclinis.* *teres* is defined by Festus 'in longitudine rotundatum', and Servius more than once gives a similar explanation. Right, if a cylinder or pole be in question: so *teretes trunci* and *teres oliva* in Virgil. It is connected with *tero* and similar Greek words, and seems to denote that the thing with which it is joined is of the proper shape, neither too thick nor too thin: thus a *teres cervix* is a neck that has the true outline of beauty, neither lean nor fleshy, neither too long nor too short: so *brachiolum teres* in Catullus, *teretes surae* and *teres puer* in Horace. Apul. florid. 15 p. 51 says of a beautiful statue *cervix suci plena, malae uberes, genae teretes*, where the epithets are nearly synonymous: comp. too IV 58 the *teretis tunicas* and V 803 *Folliculos teretis* of the cicada, i.e. coats of equal and regular thinness and fineness all over. Hence metaphorically *aures teretes* in Lucr. and Cic., *oratio teres* in Cic., *ore teres* in Persius, *teres atque rotundus* in Horace. 36 *Pascit, avidos, inhians*: the simple directness of the terms has a singular force: comp. Tasso Ger. lib. XVI 19 *E i famelici sguardi avidamente In lei pascendo*: Spenser is full of imita-

tions, such as this *Long fed his greedy eyes with the faire sight.* *pascere oculos* is a common phrase: II 419 *oculos qui pascere possunt*: see n. there. *inhians in*: the verb generally takes a dat. or acc.; but Cic. Brut. 22 *in te intuenti*, 26 *in quam cum intueor.* Esdras I 4 31 *The king gaped and gazed upon her with open mouth.* **37** more emphatic than the *pendet ab ore* of Virgil and Ovid: Petron. sat. 127 *ex cuius osculo pendes.*

38 *corpore sancto* seems to belong both to *recubantem* and *circumfusa.* **39** *circumf.*: Livy VIII 35 8 *degressum eum...circumfusi*: the same constr. as in Lucr.: Ov. met. IV 360 *Et nunc hac iuveni, nunc circumfunditur illac,* and XIV 585 *colloque parentis Circumfusa sui*: in both which places it governs a dat., as in Pliny II 161 *circumfundi terrae undique homines*: comp. 87 the accus. *virgineos circumdata comptus* with VI 1036 the dat. *rebus circumdatus adpositusque*, which is the usual prose constr. as Cic. in Catil. III 2 *Tectis ac moenibus subiectos prope iam ignes circumdatosque*: but Livy VII 34 11 follows Lucr.: *circumdare undique collem armatis volunt.* Virg. Aen. VIII 406 has *Coniugis infusus gremio* of the husband in the arms of Venus; Sen. Med. 946 *infusos mihi Coniungite artus.* *loquellas*, also *querella*, and prob. *luella*: see Lach. to III 1015, who says the *l* is doubled after the long vowel, when a short one precedes it: so also *medella* cet.; but *suadela tutela* and the like, when a long vowel precedes the long vowel: a canon fully borne out by inscriptions and the best mss.: if we may depend on their mss. Cicero and Persius wrote *cămellus*, Catullus *phăsellus.* **40** *plac. pac.*: VI 73 *placida cum pace*: *placida pace* I find twice in the Aeneid, twice in Ovid, twice in Seneca. *incluta*: Plautus Pers. 251 has *Iovi incluto.* **41** *agere hoc*: here and IV 969 *Nos agere hoc autem et naturam quaerere rerum* Lucr. alludes to the famous sacrificial formula *hoc age*, so often adopted by Latin writers: it seems to have struck Plutarch as a foreigner: he more than once explains the ΟΚ ΑΓΕ, as in Coriol. p. 225, προσέχειν τοῖς ἱεροῖς καὶ μηδὲν ἔργον ἐμβαλεῖν μεταξὺ μηδὲ χρείαν ἀσχολίας. Lucr. could not, sweet as it was to see from shore one's neighbour struggling with the sea, imitate the more than epicurean indifference of Sulla: see Sen. de clem. I 12 2 *Exterrito senatu 'hoc agamus' inquit 'P. C. seditiosi pauculi meo iussu occiduntur'*: Juvenal, speaking of poetry, VII 20 *Hoc agite*, 48 *Nos tamen hoc agimus.* [**42** comp. Manil. I 795 *et Claudi magna propago.*] **43** *desse*: Cic. pro Sest. 101 *Propugnatores autem reipublicae qui esse voluerunt, si leviores sunt, desciscunt; si timidiores, desunt*; ad fam. VI 6 6 *veritus sum deesse Pompeii saluti, cum ille aliquando non defuisset meae*; Caesar bell. Gall. V 33 2 *Cotta...nulla in re communi saluti deerat.* On comparing these lines with many passages in the Greek writers, it will be seen that the Roman here has been too strong for the epicurean. *desse*, and 711 *derrasse* with one *e*: see Vel. Longus ap. Lach.: but III 861 *deerrarunt.*

41—43: it seems to me that Lucr. was writing these lines towards the close of 695 or four years before his death, when Caesar was consul and had formed his coalition with Pompey. Memmius was then praetor designatus, in fierce opposition to Caesar and at that time on the side of the senate with Cicero and doubtless Lucretius. There was almost a reign of terror: see Livy epit. 103 *Leges agrariae a Caesare consule cum magna contentione, invito senatu et altero consule M. Bibulo, latae sunt.* Hear what Cic. says, writing to his brother in that year, I 2 15 *Rempublicam funditus amisimus...si qui antea aut alieniores fuerant aut languidiores, nunc horum regum odio se cum bonis coniungunt...praetores habemus amicissimos et acerrimos cives, Domitium Nigidium Memmium Lentulum; bonos etiam alios, hos* (*sed hos* Wesenb.) *singulares.* It could scarcely have been later than 696, as in the spring of 697 Memmius went as propraetor to Bithynia, with Catullus in his train: see Schwab. Catull. I p. 158 foll. He certainly did not return to Rome before 698, and the year following Lucr. died.

Gaius Memmius, son of Lucius, of the Galerian tribe, had, like the rest of his family, no cognomen; although he has very generally received one from the editors of Cicero having chosen to alter the correct reading of mss. in Cic. ep. ad fam. XIII 19 2 *C. Maenius Gemellus* to *C. Memmius Gem.*: see Mommsen Roem. Muenzw. p. 597. He would appear to have been a hard selfish unprincipled man, to judge from history and the character given him by Catullus in his 10th and 28th poems, which form a curious comment on the 'worth and sweet friendship' which Lucr. found in him, deceived, as men of his temperament so often are, by the specious qualities of a worldly man. But he was already dead when Memmius so flagrantly disgraced himself in the matter of the consulship, and went into exile, abandoned by Caesar to whose party he had impudently gone over. His country found that 'the general weal' could easily enough dispense with his services. His contempt for Latin letters which Cicero mentions would also seem to fit him but little for patron to so genuine a Latin poet. Did Lucr. address Memmius as a believer in Epicurus? or did he rather seek to convert him to that creed? In either case his teaching was sadly thrown away: he called on Memmius to look on Epicurus as a god: it appears from a curious letter, ad fam. XIII 1, written from Athens by Cicero to Memmius who had just gone to Mytilene, that the latter had obtained from the Areopagus a piece of ground on which stood some ruins of Epicurus' house, and that he wished to pull these down in order to build for himself. Though he had now abandoned the design of building, he churlishly refused to give up the property to Patro, at that time head of the school. Patro and his sect looked on these ruins as a holy place; and Cicero out of love for him and his predecessor Phaedrus and above all Atticus, begs Memmius, as the ground is now of no use to him, to let them have it. All

through the letter he expresses himself, and assumes that Memmius feels, the greatest contempt for epicurean tenets; but he says he loves Atticus as a brother, 'non quo sit [Atticus] ex istis [epicureis]; est enim omni liberali doctrina politissimus; sed valde diligit Patronem, valde Phaedrum amavit'. And surely Lucr. too had much esteemed Patro, much loved Phaedrus: Id cinerem aut manis credis curare sepultos!

Most readers of this opening address, like the one who of old placed in the margin of the ms. the six lines from the 2nd book, must have been struck by its curious contrast with the poet's philosophical principles. Bayle in his article on Lucr. n. I says it is most reasonable to call it a 'jeu d'esprit'. Lucr. seeing that all poets invoked the muses at the beginning of a great work, did not wish to be without a like ornament and chose Venus as the divinity most suitable to a natural philosopher; in the same way he invokes Calliope VI 94. There is some plausibility in this: Calliope we at once feel to be an ordinary personification of the epic muse: and had Lucretius' address to Venus had no more depth of feeling in it than that to Calliope, or other poets' invocations of the muses, we should have accepted her as a simple impersonation of the active energy of nature. But the intense earnestness of the language, the words plain and simple in themselves, yet instinct with life and passion, make us feel that there is more than this. If the poet began with such an intention, his headstrong muse has got the better of his philosophy, and constrained him to follow her guidance. This perhaps is his best defence, if defence be needed: νουθετεῖται μὲν ὑπὸ τῶν πολλῶν ὡς παρακινῶν ἐνθουσιάζων δὲ λέληθε τοὺς πολλούς. Montaigne, essais III 5, has well perceived the characteristic features of this address. He quotes the latter part of it and then compares it with a fine passage of the Aeneid, VIII 387 foll.; and thus concludes 'Quand je rumine ce *reicit, pascit, inhians, molli, fovet, medullas, labefacta, pendet, percurrit,* et cette noble *circumfusa* mère du gentil *infusus* j'ay desdain de ces menuës pointes et allusions verbales qui nasquirent depuis'. How tame even Spenser's elegant paraphrase and Dryden's translation are by the side of the original. Lamb. cites with approbation P. Victorius who argues from Plut. adv. Col. and Cic. de nat. deor. I 45, that Epic. did not forbid sacrifice and prayer to the gods; 'habet enim' says Velleius 'venerationem iustam quidquid excellit'; but he adds that Lucr. prays here not as a philosopher, but as a poet. The stoic Cleanthes' hymn to Jupiter is conceived in much the same spirit: he addresses the god as Ζεῦ φύσεως ἀρχηγέ, whom all mortals should address, Ἐκ σοῦ γὰρ γένος ἐσμέν.

Many motives doubtless were acting at once on the poet's mind. Venus was symbol of the all-pervading living force of nature; she was legendary mother of the Romans: Mars ruled the first, she the second month of spring and the year. Mars indeed in the old Italian mythology was the youthful and beneficent god of plenty, father of the Latin races:

'cum hodieque' says Macrob. sat. I 12 8 'in sacris Martem patrem, Venerem genetricem vocemus'. Why then does Lucr. desert the true old conception of this god, one seemingly well-suited to his purpose, and adopt the Greek legend? From the time of Ennius at least the Roman poets good and bad alike borrowed the setting of their poetry from Greece: the fauns and casmenae had yielded for ever before the muses of Helicon. 'Inmortalis mortalis si foret fas flere, Flerent divae Camenae Naevium poetam', Naevius wrote for his own epitaph: with Campanian insolence, Gellius says; but well they might weep for him; for in him their Homer died. Mars had now become an Ares, the destroying lord of war. Again though Empedocles' poem on nature was much shorter than that of Lucr. and doubtless in many respects inferior, yet to some extent it was to the latter what the Iliad and Odyssey were to Virgil, his technical model. Among the recently discovered fragments of Empedocles there is an address to Calliope which Lucr. prob. had in his mind when he penned VI 94. Empedocles' two great principles of love and strife by whose alternate victory and defeat he personified the ceaseless round of nature had evidently a great influence on Lucr. Comp. now the passages quoted by Sturz Emped. 240 sqq. Eustathius there tells us that Empedocles made the union of Ares and Aphrodite the symbol of his love, their release by Hephaestus the symbol of his hate: Heraclitus in his allegories declares that Homer, in naming strife Ares and love Aphrodite, confirmed the Σικελικὰ δόγματα or doctrine of Empedocles.

Long as this discussion is, I will call attention to another point: observe 26 *Memmiadae* nostro *quem tu, dea*, cet. and compare the coins of the Memmii in Cohen's médailles consul. and esp. Mommsen's Roem. Muenzw. p. 597: it will be seen that Venus crowned by Cupid appears on the coins of this Memmius and apparently his elder brother Lucius. We come to the flatterers of the Julii before we find so large a proportion of the coins of any family with Venus on them. Martha in his book on Lucr. published in 1869 (p. 61) 'propose une explication nouvelle', and draws, I am glad to see, the same inference from the coins of the Memmii which I had done, and so does H. Sauppe in the Philologus for 1865, p. 182. Virgil, who is said to have taken it from the Punic war of Naevius, tells us that the Memmii claimed descent from the Trojan Mnestheus. Aen. XII 127 Mnestheus is called *Assaraci genus*. The Memmii may have claimed Venus for ancestress, though Virgil reserved that honour for the Julii. At all events she must have been held in peculiar honour by them; and Lucr. may have wished to gratify his patron, by making her his own patron lady. Cohen says p. 112 'Hercules and Venus were the objects of the peculiar veneration of Sulla: therefore we see the head of Hercules on nos. 49 and 50, and that of Venus on 51'. Now Cohen mentions two other coins of the Memmii which have a head of Hercules; and Mommsen p. 642 describes two

struck by the son of our Memmius, one with a head of Ceres, in honour of his father; the other in honour of a remoter ancestor, with a Ceres and the legend MEMMIUS· AED· CERIALIA· PREIMUS· FECIT. At the opening of book V Ceres is spoken of and a long enumeration made of the deeds of Hercules, which are shewn to be far inferior to those of Epicurus. In the beg. of VI the discovery of corn is recorded, but declared to be of less importance than that of philosophy by Epicurus. Did Lucr. mean to say 'You pride yourself, Memmius, on your family connexion with Hercules and Ceres; but let me tell you you had better learn to be proud of the philosopher'? Many of these motives may have weighed with Lucr. and his poetical instinct carried him beyond his first intention. Let me here refer to Prof. Sellar's Roman poets of the republic p. 276 foll.

50—61 he calls on Memmius to attend, while he explains the nature of the first elements of things. **50** Lach. has rightly seen, as I have said in notes 1, that the interpolated verses have thrust out the protasis of this sentence, in which Memmius must have been addressed; unless the Verona interpr. Verg. misquotes and refers to IV 912 *tenuis aures animumque sagacem*, which is not probable: the omission of part of the v. in AB suggests a still greater disturbance. *Quod superest* is a favourite expression of Lucr. for 'to proceed to what remains' 'moreover'; and is often put in the middle of a sentence at the beg. of the apodosis, as here: compare II 39, 491, VI 1000, etc.: see also II 546 and IV 195, where it is in another part of the sentence: perhaps Aen. IX 157 is likewise a case in point. *vacuas auris* is well illustrated by Quintil. inst. X 1 32 *Neque illa Sallustiana brevitas qua nihil apud aures vacuas atque eruditas potest esse perfectius, apud occupatum variis cogitationibus iudicem et saepius ineruditum captanda nobis est.* Livy XLII 14 2 *praeoccupatis non auribus magis quam animis ab Eumene rege, omnis et defensio et deprecatio legatorum respuebatur*, where *respue.* illustrates *contempta relinquas* of 53; XLV 19 9 *is ad occupatas iam aures sollicitatumque iam animum cum venisset*; 31 6 *implevere aures*: Plautus has *vocivas auris*; Horace *vacuas auris*. *sagacem* a favourite epithet in Lucr. of *animus* and *mens*: the metaph. is from the scent of dogs, and is well illustrated in Forcell. where however de nat. deor. should be de divin.

51 *Sem. a curis*: wisdom and happiness being unattainable without ἀταραξία or perfect exemption from care and trouble. *veram ad rationem*=Epicuri philosophiam: comp. V 9 *vitae rationem invenit eam quae Nunc appellatur sapientia*: and II 1023 *Nunc animum nobis adhibe veram ad rationem.* *ratio* is as common in Lucr. as it is in Cicero, and has perhaps as many meanings: notice the word here and 54 and 59, the sense in each case different: and comp. 128—130 *ratio...qua fiant ratione...ratione sagaci* within three lines: the auctor ad Heren. IV 18 gives

as an instance of faulty repetition *nam cuius rationis ratio non extat, ei rationi ratio non est fidem habere.* **52** comp. Ciris 46 *Accipe dona meo multum vigilata labore*, in which there is also a reference to 142 *noctes vigilare serenas.* *disposta*, as III 420 *pergam disponere carmina*: it has the same sense as *digerere.* **54** *de sum. cae. rat.* as below 127 *superis de rebus habenda Nobis est ratio.* **55** *incipiam* rather attempt than simply begin; so IV 29 *Nunc agere incipiam*; Ter. Andr. 493 *quem tam aperte fallere incipias dolis*: see Conington to Aen. II 13, who refers to Henry: the two meanings however easily pass into one another: VI 432 *Rumpere quam coepit nubem*; and so *inceptum, coeptum.*

55 foll. *rerum primordia* or *primordia* alone is here declared by Lucr. to be his proper and distinctive term for the atoms or first elements of things. Once, IV 28, he resolves it into *ordia prima*; sometimes he has instead of it *cunctarum exordia rerum.* In the gen. dat. and abl. where these words do not suit his verse, he uses *principiorum* and *principiis*, in the plur. only: 707 *principium* applies to those philosophers who had only one first-beginning. *principia* he never employs, thus shewing that *primordia* is his proper and distinctive term, and the other a mere substitute, which he need not therefore here mention: II 313 *primorum* is used for *principiorum.* 'First-beginnings' seems to me to give the peculiar force of the term better than any other word I can hit upon: *ἀρχαί, τῶν ὄντων ἀρχαί* and the like are the equivalents in Epicurus and others. He goes on to enumerate several synonymes: *materies* i. q. *ὕλη*, *corpora genitalia* or *prima*; *corpora* alone or *corpora rerum* is more common and used at least as often as *primordia*; he also has *corpora materiai*; *corpuscula* too is not uncommon: *semina rerum* which he mentions here or *semina* alone is frequent enough. *σώματα, ἄτομα σώματα* and the like in Epicurus. Lucr. has no equivalent for *αἱ ἄτομοι* or *ἄτομα σώματα.* Cicero uses *corpuscula, atomi, id est individua corpuscula*, and *individuum* as a subst. to express the atoms of Epicurus or Democritus. Lucr. does not here mention *elementa* which is frequently found in his poem and answers to one of the commonest Greek words *στοιχεῖα.* *ὄγκοι*, bulks or magnitudes, often occurs in Epicurus, Sextus and others. None of the above terms is employed by Lucr. in the sing. to denote one atom except *corpus* once or twice: in fact he rarely needs the singular: *figurae* or 'shapes' is not unfrequent with him for his atoms, corresponding in this sense to the *εἶδος* and *ἰδέα* of Democritus, who also has *φύσις* and the strange *δέν*.

56 57 *Unde*=ex quibus, *Quove*=et in quae. *Unde, Quove, Quae* all refer to *primordia.* *Quove*: III 34 *Quove*; but in the spurious repetition IV 47 *Quoque.* V 71, 184 and 776 *Quove*: 168 and 176 are not in point, as *ve* has there its proper force. VI 29 *Quidve*: II 64 *Quaeque*: V 185 *Quidque.* In the above cases the *ve* seems=*que*: comp. Wagn. quaest. Virg. XXXVI 5, where it appears that Virgil's usage is much the

same. One might suppose that this use began from a wish not to confound the relative with *quisque*: thus III 34 *Quoque modo possint res ex his quaeque creari* would have been ambiguous. As *quicque*, not *quidque*, is the neut. of *quisque*, there would be no objection to *quidque* which is found in V 185; yet in II 64 also AB Gott. etc. have *Quaeque*; and IV 634 and VI 533 *quareve*=quareque, which would not be ambiguous. **57** *eadem* is of course fem., *perempta* being synon. with *res peremptas.* Lucr. has no objection to change to the neut.: 157 *res quaeque*, 158 *quaeque* neut.; III 424 *Quatenus est unum inter se coniunctaque res est*: see n. to III 184: this of course has no bearing on Wakefield's absurd argument that 190 *Crescentes=res crescentes.* Lucr. like the older writers generally, does not seem to have felt the ambiguity of *perempta* in the neut. coming next to *natura*: comp. V 1414, 1416 and 1417. **58** *gen. corp. rebus* seems=cor. quae sunt gen. rebus: see Conington to Aen. II 556, who there quotes Aen. X 135 *Aut collo decus aut capiti*, and 203 *Ipsa caput populis*; and Madvig Lat. Gr. 241 3, where Tac. hist. I 89 *longo bello materia* is not unlike this passage of Lucr. who thrice has *caput* with a dat. for a river-head: see Lach. to VI 729. **60** *suemus* and other parts of the verb are dissyll. or trisyll. indifferently in Lucr.; [Prop. I 7 5 has *consuemus.*] *usurpare*: see Forc. for instances from Cicero of this use. **61** *primis* seems in appos. with *illis*: illis, ut primis: comp. Virg. ecl. VI 33 *ut his exordia primis Omnia.*

In order to apprehend the poet's drift, which I seem to myself to see more clearly now than I formerly did, the whole of the verses from 50 to 135 must be kept in view at the same time. The loss before 50 of more lines than one apparently has broken the connexion with what precedes. Lucretius wishes at the outset to impress upon his readers that his purpose in writing is not to gratify scientific curiosity, but to free man from the two great obstacles to happiness and tranquillity of mind, fear of the gods and fear of death. He begins then with saying that he will tell of the true system of heaven and the gods. This promise he carries out in a portion of the 5th and 6th books. In the rest of the paragraph he says he will explain the nature of his first-beginnings: that explanation fills the greater part of the first two books, and is dwelt upon here with so much emphasis, because they form the necessary groundwork of his whole physical philosophy. In the next paragraph, 62—79, Epicurus is glorified for having first proved the vanity of this fear of the gods; the sinfulness of which fear is shewn in the following verses, 80—111, by a vivid picture of the sacrifice of Iphigenia. And not only fear of the gods must be banished, but also fear of death. This can be done by explaining the real nature of the soul, and the true theory of images, which will save us from being frightened by stories about hell, and of the return to earth of the ghosts of the dead: vss. 102—135. These topics are discussed at length in the 3rd and 4th books. The motive for the seemingly

somewhat artificial arrangement of these introductory paragraphs will now be understood; through ignorance of which some recent scholars have played sad havoc with the poem by vain and mischievous transpositions and the like.

62—79: human life lay prostrate beneath religion, until a man of Greece rose up, explained the true system of the universe, and trampled on religion in turn. **62** *ante oculos*, plain for all to see: often used by Lucr. in cognate meanings, as 342 and 984 (998) for what is visible to sense: [Sen. rhet. controv. I 1 16 *stare ante oculos Fortuna videbatur.*] **63** *religione*, with one *l*: so the best mss. of other authors also: *rellig.* only once, V 114, in AB. **65** *super* often in Lucr. has the sense of *insuper* or *praeterea*, never I think that of *desuper*: the former may be its meaning here; though that would be weak; I take it therefore as in 39 *circumfusa super* 'being above him', and Aen. IX 168 *Haec super e vallo prospectant Troes*, 'the Trojans being above look forth etc.': so here 'standing over mortals being herself above'. I doubt whether in Virgil it ever bears the sense of *desuper*: in Aen. V 697 I take it to mean *insuper*: yet there is no question that *superne*, a favourite word with Lucr., sometimes has the force of *desuper*; and the two meanings are often not easy to discriminate. **66** *Graius homo*, as Enn. ann. 183; and Virg. Aen. X 720 who imitates probably both Ennius and Lucr.: Ennius twice uses in the same way *Romanus homo*: Cic. ad Att. VII 3 10 *quod homo Romanus* Piraeea *scripserim*, *non* Piraeeum. *toll. con. oc.*: Livy VI 16 3 *nec adversus dictatoriam vim aut tribuni plebis aut ipsa plebs attollere oculos aut hiscere audebant*; Prop. I 15 37 *Et contra magnum potes hos* i.e. oculos *attollere solem?* (Sen.) Octav. 841 *Contraque sanctos coniugis vultus meae Attollere oculos.* [*mort. oc.*: see Catull. 64 17 and Ellis there.] *contra* at the end of this and the next verse are of course in intentional apposition, as are *primus* and *primum*. **68** *fama deum*: see notes 1: so Livy X 24 17 *ad famam populi Romani pertinere*; Aen. VIII 731 *Attollens umero famamque et fata nepotum*; Heyne and Conington seem to me rightly to explain in the same way Aen. IV 218 *famamque fovemus inanem*: thus Epicurus proved the *fama deum* to be *inanis*, full of sound signifying nothing. Indeed an epithet to *fama* would to my mind impair, not increase the force of the expression. **70** *Inritat* perf.: so VI 587 *Disturbat urbes*, and V 396 *superat et* which seems a certain conj. of Lach.: in each case the *-at* is followed by a vowel; but on this point see n. to III 1042 *obit.* *arta* always: so *autumnus*, but *auctus* and the like: comp. *quintus*, *Quintus*, but *Quinctius*; in the list of πρόξενοι in Wescher and Foucart's inscript. rec. à Delphes no. 18 we find the praenomen Κοΐντος more than once, but l. 112 Τίτος Κοίγκτιος of Flamininus: yet in the new corp. inscr. Lat. 1008 *Quinctus* is once found, [and Wilmanns' ex. inscr. 879 has *cos. quinct.* (of the year 725.)] and Plaut. trin. 524 A has *quincto*, merc. 66 Ba has *quicto*; but this spelling seems to have been quite obsolete in the time of Lucr. though recalled by the affected antiquarian Fronto: the corp. inscr. has *quinctilis* and *Quinctilius*; the old ms. of the last five books of Livy both *Quinctilius* and *Quintilius Varus*; comp. too *fartus sartus setius tortus indultus fultus.* **71** [L. Mueller compares Lucil. XXX 1 *Quoi sua committunt mortali claustra Camenae.*] *cupiret*: Enn. ann. 10 *Ova parire solet*; 384 *si vivimu' sive morimur*; Ov. met. XIV 215 *cupidusque moriri*: from Plautus and Terence many similar forms might be given.

73 Epic. is the subject of *Processit* and *peragravit.* *flamm. moen. mundi* a noble expression which frequently recurs, to denote the fiery orb of ether that forms the outer circuit of the world: its nature is fully described in the fine passage V 457—470, ending with *Omnia sic avido complexu cetera saepsit*, imitated in paradise lost III 721 *The rest in circuit walls this universe*: the use of 'universe' is of course quite unepicurean. It may be a question whether *mundi* in this phrase means the whole world, or is a synonyme, as it so often is, of *caelum* or *aether*: it certainly appears to have the latter meaning in VI 123, where *capacis* well expresses the *avidus complexus* of ether: the former seems more poetical and is confirmed by the imitation in Manilius I 151 *Flammarum vallo naturae moenia fecit*, where *naturae* clearly denotes the whole world: this constant imitator of and carper at Lucr. has also 486 *moenia mundi* in a passage where he is trying to refute Epicurus and him. **74** an emphatic oxymoron: he passed beyond this world and traversed in thought the immeasurable universe: Cic. de fin. II 102 must surely have been thinking of this passage when he says *haec non erant eius qui innumerabilis mundos infinitasque regiones quarum nulla esset ora, nulla extremitas, mente peragravisset*: see Madvig: and Hor. od. I 28 5 *animoque rotundum Percurrisse polum morituro.* *mente animoque* a mere poetical tautology: III 84 *animum dico, mentem quam saepe vocamus*; and all through that book they are synonymes. [Cic. epist. X 5 2 perhaps differentiates the two: *ut tota mente omnique animi impetu in rempublicam incumbas.*] Lucr. more than once too uses *mens animi*, as does Catullus after or before him. Virgil was probably thinking of these words and this rhythm in Aen. VI 11 *magnam cui mentem animumque*; though the expression is common in prose, and is found in Cicero, Caesar, Livy and Tacitus. **75** Lamb. seems right in comparing *refert victor* with Aen. IV 93 *laudem et spolia ampla refertis*: where *refertis* however is simply 'carry home', as Plaut. Poen. IV 2 25 *domum haec ab aede Veneris refero vasa.* At the same time it here unites the common and cognate meaning of a messenger or the like bringing back a report: the two senses I have tried to combine. The end of this and the whole of the next two verses are repeated again in

this book and in the 5th and 6th. **77** *alte term. haer.*: the metaphor is of course from a stone pillar fixed in the ground as a boundary between two properties: II 1087 *vitae depactus terminus alte*; Aen. IV 614 *hic terminus haeret*: not unlike are Accius 481 *Veter fatorum terminus sic iusserat*, and Hor. carm. saec. 26 *stabilisque rerum Terminus*. **78** *pedibus subiecta*: Livy XLV 31 3 *obnoxios pedibus eorum subiecit*; XXXVIII 46 3 *pedibus paene hostium aciem subiecit*; VIII 9 5 *super telum subiectum pedibus stantem*; Sen. epist. 94 56 *pedibus aurum argentumque subiecit*; Suet. Calig. 26 *veste detracta subiectaque militum pedibus*. Virg. geor. II 490 *Felix qui potuit rerum cognoscere causas Atque metus omnis et inexorabile fatum Subiecit pedibus strepitumque Acherontis avari* evidently alludes to this and some other passages, III 37 *Et metus ille foras praeceps Acheruntis agendus*, 1072 *Naturam primum studeat cognoscere rerum*, and V 1185 *quibus id fieret cognoscere causis*. Formerly I thought that perhaps Virgil referred to some ideal philosopher, such as Eurip. fragm. inc. 101 Dind. paints, Ὄλβιος ὅστις τῆς ἱστορίας Ἔσχε μάθησιν κ.τ.λ. and that Lucretius and the *magni docta dicta Sironis* might have prompted Virgil to think rather of Epicurus than of Lucr. himself. Conington, who in his first edition says 'that Virgil clearly refers specially to Lucretius', in his second seems to come to much the same conclusion as I had come to. But now, when I compare geor. II 475—482, in which Virgil expresses his longing to be the poet of science, with 490—492 *Felix qui* cet.; and then 483—489, in which he declares that, if his genius is unequal to that, he will seek the country and its enjoyments, with 493 494 *Fortunatus et ille* cet., I feel that by his *Felix qui* Virgil *does* mean a poet-philosopher, who can only be Lucretius. For see my note at III 449, where I shew at length how Virgil's whole mind, when he was writing his second georgic, must have been saturated with the poetry of Lucretius. Sainte-Beuve in his étude sur Virgile, p. 108, observes that Lucretius alone among Latin poets seems to have been honoured by Virgil 'comme un véritable ancien'. **79** comp. Manil. II 452 *Exaequentque fidem caelo mortalia corda*.

80—101 think it not sinful thus to spurn religion: nay rather it is religion who is the mother of unholy deeds; such as the sacrifice of Iphigenia by her own father. **80** *Illud in his rebus*, a prosaic, but very favourite phrase of Lucr. to denote some special point in the general question. **80—83** comp. Epic. in Diog. Laert. X 123 ἀσεβὴς δ' οὐχ ὁ τοὺς τῶν πολλῶν θεοὺς ἀναιρῶν, ἀλλ' ὁ τὰς τῶν πολλῶν δόξας θεοῖς προσάπτων. **82** *indugredi*; also *indupedire* and *induperator* are often used by him; *indeptus* and *iacere indu* for *inicere* once each; as well as *indu manu* and *endo mari*: in imitation I presume of Ennius: in the remains of the latter *indu* governs the abl. *endo* the acc. The forms appear to be epic, not occurring in the fragments of Ennius' or other tragedies: *indaudire* and *indipiscor* do occur in Plautus: the latter with

indigeo induo remained in use: Ribbeck scaen. Rom. frag. p. XII quotes other forms from the old glosses. *quod contra*: this expression is found in Cic. Cato 84; Laelius 90; pro Quinctio 87: comp. too de fin. V 76 *quod item fratri puto*; 83 *quod vestri non item*. Here, and 221 *Quod nunc...quia*, 623 *Quod quoniam ratio reclamat*, and in *quod utinam*, and the common *quod si, quod nisi, quod ni*, the *quod* I now think is to be explained as Ritschl after Bergk explains it, neue Plaut. Exc. p. 57; as the old abl. with the sense of *qua re, quam ob rem* and the like. When *quōd* or *quo* went out of use in such senses, the *quod* remained stereotyped in these phrases, as a mere symbol not understood. Buecheler, as Ritschl observes, well compares the *quod circa* of the lex Repetund. l. 13, the same as the *quo circa* of the later lex Iulia municip. ll. 103, 118; the *quocirca* in fact of literature. I would thus explain Livy XXXVIII 43 12 *nihil est, quod se ab Aetolis separent*. *illa* emphatic in a bad sense, as IV 181 and 910 *ille gruum clamor*: II 362 *Fluminaque illa* in a good sense. **84** *quo pacto*, as 912. **86** *prima vir.* a harsh expression, like Ov. am. I 9 37 *Summa ducum Atrides*: Statius perhaps imitates Lucr. in silv. III 3 197 *tibi cuncta tuorum Parebunt*, and V 1 79 *qui cuncta suorum Novit*: τὰ πρῶτα followed by a masc. gen. is common enough in Greek; [comp. Eur. H. F. last line τὰ μέγιστα φίλων ὀλέσαντες.] **87** *infula* a flock of wool knotted regularly along a *vitta* or riband, fastened by this riband round the head and hanging down *pari parte* over each side of the head: worn by priests and victims, as often seen on works of art: comp. Rich's companion s.v.: also geor. III 487, and Ov. ex Ponto III 2 74 *Ambiat ut fulvas infula longa comas, Dumque parat sacrum, dum velat tempora vitta*, of Iphigenia about to sacrifice Orestes and Pylades: she wears in Lucr. the *infula* of a victim instead of the *vittae* of a bride, which would have better become the *virgineos comptus*; these words probably implying that her hair was arranged in the *sex crines* for her expected marriage: Ov. fasti II 557 *Nec tibi, quae cupidae matura videbere matri, Comat virgineas hasta recurva comas*; as this custom was a marked feature of marriage: *capiundas crines*, Plaut. most. 226. The constr. of *circ. comp.* is like 38: see n. to 39. *comptus*, that is *compta coma*, used by Afranius also according to Festus: in III 845 it has quite a different sense. **88** the constr. is *Ex utr. mal.*, *pari parte*: *pari parte* being almost an adv. in the sense of *pariter*: V 674 *Et pariter mollem malis demittere barbam*: Lucr. never cares to avoid such ambiguities. **92** *genibus summ.* lit. 'let down by her knees': comp. Ov. met. IV 340 *genu submisit*: and VII 191 *in dura summisso poplite terra*: Valer. Max. VI 8 4 *ut se tremibunda Pindari genibus summitteret*, the constr. is quite different; though it is just possible that *genibus* in Lucr. also may be the knees of others: Sueton. III 20 *seque patri ad genua summisit*. *petebat* more graphic than the perf. **93** *in tali tem.*: Lucr. is fond of this use of *in*: 234 *in eo spatio*:

in tempore occurs more than 20 times; it is found too in Cicero, Livy and other prose writers: v 670—672 twice *certo tempore*, once *in certo tempore*; he says *in puncto tempore*, *temporis in puncto*, but *puncto diei*; *in partibus anni* and *partibus anni*. **94** Lamb. compares Eurip. Iph. A. 1222 *πρώτη σ' ἐκάλεσα πατέρα καὶ σὺ παῖδ' ἐμέ*, which Lucr. imitates, and not, as Blomfield thinks, Aesch. Agam. 214 (220): 'comp. Aeschin. Ctes. § 77' J. E. M.

95—100 a highly elaborated passage: in the first part a studied ambiguity in the terms which are common to marriage and sacrifice; in the last a studied contrast between the youth and innocence of the victim and her cruel fate. **95** *sublata* like λαβεῖν ἀέρδην in Aesch. Agam. 220; alluding at the same time to the ceremony of taking the bride by violence from the arms of her mother. *virum* the general term to indicate at once the *ministri* and the *viri* who executed this formal rape. *tremib.* expressing at once the trembling of the victim, and the fluttering anxiety of the bride: *tremibunda* AB: see Lach.: so mss. of Aen. x 522, of Valer. Max. vi 8 4. **96** *deducta*, said of the victim, is also a proper term for escorting the bride to her husband, *mihi deductae fax omen praetulit*. In a very old elegiac epitaph found at Beneventum, forming 1220 of the new corpus inscr. Lat. and 1623 of Mommsen's inscr. Neapol., a deceased wife says *Nunc data sum Diti longum mansura per aevum, Deducta et fatali igne et aqua Stygia*; Tac. ann. xiv 63, of Octavia, *huic primus nuptiarum dies loco funeris fuit, deductae in domum in qua nihil nisi luctuosum haberet*. *soll. more sacr.* the sacrifice of the sheep etc. in the most solemn form of marriage. **97** *claro hym.* of which we have so brilliant a specimen in Catull. 61; the hymeneal being sung partly while she was in her own home, partly as she was escorted thence to her husband's house and partly while she was with her husband. *comitari* pass. also in Ovid, who has *comitat*, *comitare*, and more than once *comitavit*. **98 99** the position of the words is very artificial: *inceste*, denoting the pollution of blood, is separated from *conciderct* in order to contrast better with *casta* and *nub. tem.* when all occasion of pollution should be far away: *maesta* disjoined from *hostia* and put between *mactatu* and *parentis* gains great additional force: then notice *mact. par.*; the father who should give away the bride, is he who murders her; then too the place in the verse of *hostia* and *maesta* seems intended to be parallel with that of *Exitus* and *felix faustusque* in the foll.: *casta inceste* see n. to ii 1054 *innumero numero*, and introduction pp. 15, 16. **99** *mactatu* seems a ἅπαξ λεγόμενον. **100** *Exitus* the setting sail from Aulis: comp. iv 398. **101** *Tantum ..malorum* is found in the Ciris 455 cited by Wak., as well as in v 227 *Cui tantum* cet. What did Lucr. think of the fate of his own countrymen the Decii?—In the above passage I find no trace of imitation of the Agamemnon, unless the very doubtful one of λαβεῖν ἀέρδην in 95; but clear indications

here as elsewhere that Lucr. had carefully studied Euripides: 94 we saw is almost a translation of a line of Iph. Aul. Again with 98 99 comp. 1178 foll. of that play, *ἀπώλεσέν σ', ὦ τέκνον, ὁ φυτεύσας πατὴρ Αὐτὸς κτανών, οὐκ ἄλλος οὐδ' ἄλλῃ χερί*, and 1315 *ὢ δυστάλαιν' ἐγώ... φονεύομαι διόλλυμαι Σφαγαῖσιν ἀνοσίοισιν ἀνοσίου πατρός*: and with 101 comp. 1334 *μεγάλα πάθεα κ.τ.λ.* where Helen takes the place of religion. Again one of the most striking things in this description is the allusion to the rites of marriage: now just after the passage last quoted Achilles, to whom Iphigenia was betrothed, enters on the scene and offers to rescue his bride from death.

102—145: you will yourself at times fall away from me, frightened by vain tales of eternal punishment, which men adopt from ignorance of the soul; about the nature of which there are many false theories: one is that of transmigration adopted by Ennius: his hell being peopled only by phantoms of the living. I must therefore in addition to what I have already promised explain the true nature of the soul, as well as of those idols which frighten us in sickness or sleep. The task is difficult; but my love and admiration of you, Memmius, encourage me to labour to make these questions clear. **102** *Tutemet* or *tutimet*, a rare word found also iv 915 and in Ter. heaut.: the double suffix is curious; but Lucr. uses also *tute ipse*. *vatum* the oldest name for poets, as we are told by Varro and Enn. ann. 222, afterwards, as is well shewn by Luc. Mueller de re metr. p. 65 foll., fell into complete contempt and was discarded for *poeta*: this latter name is given to themselves by Naevius Ennius Pacuvius, to Homer by Ennius; and is used in a good sense by Cicero Lucr. and Catullus. Virgil and succeeding writers made *vates* once more a name of honour and denoted by it an inspired bard, something higher than *poeta*, as Virg. ecl. ix 34: the same again brought into fashion the antiquated and despised *camenae* or *casmenae*, even confounding them with their rivals and conquerors the muses. With Lucr. here and 109 it is a term of contempt to denote apparently singers of old prophecies and denouncers of coming ills, like the Marcius of the 2nd Punic war cited by Livy and Macrobius: comp. Horace's *annosa volumina vatum*: the epicurean Velleius in Cic. de nat. deor. i 55 contemptuously joins *haruspices augures harioli vates coniectores*: Enn. trag. 356 *superstitiosi vates impudentesque arioli*; Livy xxv 1 8 *sacrificuli ac vates ceperant hominum mentes*; xxxix 8 3 *sacrificulus et vates*; 16 8 *sacrificulos vatesque*; Sall. orat. Philip. 3 *vatum carminibus*. Zeuss gram. Celt. i p. 57 shews that the word is the same as the old Irish *fáith*, Strabo mentioning as the three highest classes among the Gauls *βάρδοι τε καὶ οὐάτεις καὶ δρυίδαι*, and explaining *οὐάτεις* to be *ἱεροποιοὶ καὶ φυσιόλογοι*. **103** *terriloquis*: lexicons give no other instance of the use of this word: Virg. Aen. v 524 has *terrifici cecinerunt carmina vates*. The poet's mistrust of Memmius here and in 332 is curious and would seem to confirm

what has been said of the small respect which the latter shewed to Epicurus and epicureans. 104 *fing. som.*: Virg. ecl. VIII 108 *ipsi sibi somnia fingunt.* 105 *vertere* = *evertere* in Virg. Aen. I 20 II 652 X 88: also in Horace Ovid and perhaps Cicero, as shewn by Forc. 106 *turbare*: Wak. compares Aen. XI 400 *omnia magno Ne cessa turbare metu.* **107** *Et merito; nam*: Ov. met. IX 585 *Et merito; quid enim* cet. *certam finem*: *finis* is always fem. in Lucr.: the mss. II 1116 have *extremum finem* which Lach. rightly alters. 109 *Relig.* often used by Lucr. in the plur. for religious fears or scruples: he twice has *religionum nodis exsolvere*, shewing that he felt *religio* to be connected with *religare*, as does Cic. de domo 105 *nisi etiam muliebribus religionibus te implicuisses*, though elsewhere he derives it from *relegere*. Fick vergl. woerterb. p. 488 traces it to a root signifying 'to care for', 'to trouble one's self for', connecting it with ἀλέγω, ἄλγος, etc. (Homer Διὸς οὐκ ἀλέγων): *nec-lego* 'not to care for'. 110 *restandi* common enough in the poets for *resistendi*: see Forc.: Livy IV 58 4 *summa vi restare*; [XXIII 45 9 *nunc paucis plures vix restatis.*] 111 Lach. here and V 302 adds *est* omitted in mss. because, he says, it cannot be omitted after the gerund, unless an infin. *esse* or a compound of *esse* follow. I have followed him in both places, but with hesitation, as Serv. to Aen. XI 230 quotes our verse without *est*. Lucretius has at least a dozen instances of the acc. after the gerund, instead of the participial constr.; [see Roby Gram. pt. II p. LXXII;] but the accus. is gen. a plur. except III 626 *eam faciundum est*, and 926 *mortem putandumst*: comp. Serv. l. l. where *pacem petendum* is read on his authority and that of other grammarians against the best mss.: Livy XLII 5 6 the ancient and sole ms. has *ad spernendum pacem*; but Gronov. and Madvig change it to *spernendam*: the constr. is known to Cicero Cato 6 *viam, quam nobis quoque ingrediundum sit.*

113 two theories of the origin of the soul; the true one that it is born with the body, the false that it enters the body at the body's birth: **114—116** three theories of the soul after death, first the true one that when severed from the body, it dies with it; secondly the false one that it enters Orcus; thirdly the equally false one that it migrates into some other living creature: Ennius believed in the Pythagorean transmigration of souls, and therefore in the 2nd and false theory of the soul's origin and the 3rd and false one of its migration after death: ann. 10 *Ova parire solet genu' pinnis condecoratum, Non animam; et post inde venit divinitu' pullis Ipsa anima.* 114 *dirempta* refers of course to *visat* and *insinuet se*, as well as to *intereat.* 115 *lacunas* may mean pools of water, as V 794, VI 552; or merely hollows, chasms, as apparently VI 538, and Cic. Arat. 427 *Insula discessit disiectaque saxa revellens Perculit et caecas lustravit luce lacunas.* 116 *pecudes alias* seems clearly a Grecism, like Herod. I 216 θύουσί μιν καὶ ἄλλα πρόβατα ἅμα

αὐτῷ, and Empedocles 141 Karsten ἄνθρωποί τε καὶ ἄλλων ἔθνεα θηρῶν: III 611 *sensus alios* with reference to *animam*; Plaut. Men. 839 *hircus alius*; Aen. VI 411 *alias animas*; Livy VII 8 1 *vulgus aliud armatorum*; X 8 4 *in ceteris humanis*; Tac. ann. III 42 *aliud vulgus obaeratorum aut clientium*; hist. IV 56 *ceterum vulgus.* *insinuet* a very favourite word of Lucr. with many constructions: either active as here with two accus. one transit. the other governed by the *in* (comp. *haec animum advertere*); or with one accus.; or neut. with an accus. gov. of the *in*, or neut. with *per*: often too passive; once, IV 1030, followed by an accus.; elsewhere by a dat. as 113, or a prep. *per* or *in*. [It is used neut. by Cic. epist. IV 13 6 *in ipsius consuetudinem...insinuabo.*] **117** *Enn. noster*: he is so called by his admirer Cicero, pro Archia 18 and 22. *qui primus* cet. that is, who first brought to Latium the muses of Helicon and introduced Greek metres and Greek principles of art: comp. ann. 221 *scripsere alii rem Vorsibu' quos olim Faunei vatesque canebant; Cum neque musarum scopulos quisquam superarat Nec dicti studiosus erat*: the *mus. scop.* being the rocks of Helicon. To this Porcius Licin. refers ap. Gell. XVII 21 45 *Poenico bello secundo musa pinnato gradu Intulit se bellicosam in Romuli gentem feram.* The way in which Lucr. speaks of Ennius here is striking, when we compare what Heraclit. alleg. Homer. c. 4 says of Epicurus: ἅπασαν ὁμοῦ ποιητικὴν ὥσπερ δέλεαρ ἀφοσιούμενος: it would seem that an enthusiastic pupil must differ in temperament from his master. 119 *gentis It. hom.* seems simply to mean those races of men which are Italian, not unlike IV 733 *Cerbereasque canum facies*; Hor. epod. 10 12 *Graia victorum manus*; but see n. to 474; and comp. 10 *species verna diei.* *clueret*, a favourite archaism of Lucr. = sometimes *audio*, sometimes simply *sum*. Ennius ann. 4, if Vahlen is right, speaks even more proudly, *Latos per populos terrasque poemata nostra Clara cluebunt*: but this reading is more than doubtful. **120** foll.: but though he holds this opinion, he yet moreover believes in Acheron, teaching however that only bloodless idols of the dead dwell there; one of which appeared to him in the shape of Homer. 120 *Etsi praet. tam.* is somewhat prosaic. *Acher. templa* occurs also III 25, and is found in Enn. trag. 107 *Acherusia templa alta Orci.* Lucr. is very fond of the expression *caeli templa* with various epithets; he has also *caelestia* and *mundi templa*: it is not uncommon in Ennius and others: the phrase seems evidently adopted from the augural division of the heaven into *templa*: hence it conveyed a stately solemn notion; and is applied to Acheron; Plautus miles 413 has *in locis Neptuniis templisque turbulentis*: V 103 *humanum in pectus templaque mentis*; IV 624 *linguai templa*, where see note.

122 body and soul do not hold together and reach this Acheron, but only pale idols. *permaneant* seems especially said of the soul or body continuing after death, like διαμένειν: comp. Sext. Emp. adv. math. IX

72 *καὶ καθ' αὑτὰς δὲ διαμένουσιν* [*αἱ ψυχαί*], *καὶ οὐχ ὡς ἔλεγεν ὁ Ἐπίκουρος κ.τ.λ.* and 74 *εἰ οὖν διαμένουσιν αἱ ψυχαί.* Cic. Tusc. disp. I 108 *cera circumlitos condunt ut quam maxime permaneant diuturna corpora*: of the soul more than once, as ib. 18 *qui discedere animum censent, alii statim dissipari, alii diu permanere, alii semper*; 36 *permanere animos arbitramur consensu nationum omnium; qui in sede maneant* cet.: below he quotes a passage from an old tragedian, probably Ennius, to which possibly Lucr. may here refer, *Unde animae excitantur obscura umbra, aperto ex ostio Altae Acheruntis, falso sanguine, mortuorum imagines*, as it is read in Baiter and Halm's ed.: Ennius may have got the word himself from Epicharmus: frag. B 7 Lorenz *ἄνω τὸ πνεῦμα διαμενεῖ κατ' οὐρανόν*: Sen. epist. 57 7 has *permanere*; 76 25 *manent* in the same sense. It may be said that with Ennius the soul did not dissolve: that is so; but it went into another body and entirely changed its condition; and Ennius no doubt thought of the dissolution of the old body and soul as complete. With *Quo perman.* i.e. usque ad Acher. templa, Lach. compares several passages: Ovid ars II 120 *Solus ad extremos permanet ille rogos* is perhaps the most in point: comp. too Vitruv. III praef. 2 *aeterna memoria ad posteritatem sunt permanentes*; Suet. Aug. 78 *ad multam noctem permanebat.* **123** Virg. has at least four imitations of this v.: geor. I 477 repeats the very words: comp. Homer's *βροτῶν εἴδωλα καμόντων.* **124** Ennius ann. 6 *Visus Homerus adesse poeta* is a fragm. of this vision: Cicero more than once infers from these words that it was a dream, not a real vision. *sem. flor.*: Ov. met. VII 702 *semper florentis Hymetti*; culex 407 *semper florida tinus*; Sen. Oed. 532 *Cupressus virente semper...trunco*; Ovid fasti IV 519 *semperque parens*: Ter. Andr. 175 *eri semper lenitas*; [Livy VIII 1 9 *suos semper hostes, populi Romani numquam amicos*; Florus 8 2 (L. Mueller p. 29) *Tam malum est audere semper quam malum est semper pudor*: comp. *paene insula.*] **125** the tears were doubtless in regret for life: Aen. II 271 Hector seems to weep for his own wounds and the fall of Troy: comp. too Il. ψ 105. **126** *expandere* = V 54 *rerum naturam pandere*: it is a rare word. **127** foll. refer back to 54 foll.: we must not only rightly explain the system of heaven and the nature of the gods, in order to rid men of their fear of them; but likewise the real nature of the soul and of those images which are emitted from all things, that we may not dread eternal punishment, or believe like Ennius that ghosts can come back to visit the earth. **128** *meatus*, a favourite word of his: V 76 *solis cursus lunaeque meatus.* **130** *tum cum*: *tunc cum* AB; also III 710, VI 250 both have *tunc* before a consonant, but nowhere else: Lach. therefore, as Flor. 31 Camb. before him, properly reads *tum* after the usage of older writers: see also Wagner quaest. Virg. XXV 5: *tunc* before a consonant is common in Livy and the silver age. **132** *Et quae res* cet. as explained in the 4th book: *res* is the *imagines* or *simulacra*,

'images or idols', *εἴδωλα*, which are shed from all things, not the bloodless phantoms, which Ennius feigns to issue out of Acheron; and which terrify us when sick or asleep. The constr. of this verse is shewn by IV 33, which is the best comment on it, *Atque eadem* (simulacra) *nobis vigilantibus obvia mentes Terrificant atque in somnis, cum saepe figuras Contuimur miras simulacraque luce carentum*: it is well explained by N. P. Howard, Journ. of philol. I p. 116, who observes that *somnoque sep.* is a brachylogy for 'et quae res, nobis somno sepultis obvia, mentes nostras per somnum terrificet': the 'vigilantibus obvia' only of course affect us when under the influence of disease. The emphatic repetition of these horrid visions seen in sickness might seem to confirm what is related of the poet being subject to fits of delirium, or disordering sickness of some sort. A curious comment on these vss. and Jerome's or Suetonius' assertion that Lucr. was 'amatorio poculo in furorem versus' is furnished by the same Suetonius in what he says of Caligula IV 50 'creditur potionatus a Caesonia uxore amatorio quidem medicamento, sed quod in furorem verterit. incitabatur insomnia maxime; neque enim plus quam tribus nocturnis horis quiescebat, ac ne iis quidem placida quiete, sed pavida miris rerum imaginibus': comp. Lucr. *figuras Contuimur miras.* **133** *som. sep.*: V 975 *somnoque sepulti*: used by Ennius before and Virgil after him. **135** repeated IV 734, but there *quorum* begins the verse. Virg. Aen. X 641 has *morte obita* and V 31 *tellus...gremio complectitur ossa*: Cicero also uses *morte obita.* As he treats of the soul and these images so fully in III and IV, it might seem that the motives he here assigns are too narrow; but like a true disciple of Epicurus he wishes to persuade his reader or himself that he discusses these questions not for their scientific interest, but to free man from vain fears of the gods and death, and to produce that tranquillity of mind, without which happiness is not possible: he reiterates the same just below, 146—158.

136 *Nec me animi fallit* is found also 922 and V 97: Ter. eun. 274 *ut falsus animi est*: this use of *animi* is common after many verbs and adjectives: *pendere animi* is in Cicero; Plautus trin. 454 has *Satin tu es sanus mentis aut animi tui*, [and Epidic. 138 *Desipiebam mentis*,] shewing the idiom is not confined to *animi*. Madvig emend. Liv. p. 136 says 'neque Cicero neque Livius neque quisquam post comicos et Lucretium (apud quem est *animi fallit*) genitivum illum adiunxit nisi iis verbis, quae dubitationem et sollicitudinem significant'. **139** on this and similar passages see what is said above p. 11 of this vol. *egestatem*: Sen. epist. 58 1 *quanta verborum nobis paupertas, immo egestas sit* cet.; Pliny epist. IV 18 *inopia ac potius, ut Lucretius ait, egestate patrii sermonis.* **141** *amicitiae*, with reference probably to the great importance Epicurus attached to the cultivation of suitable friendships. *sufferre laborem* occurs in Enn. ann. 405. **142** *noctes serenas*:

comp. Virg. ecl. IX 44 *te pura solum sub nocte canentem*: *serenas* seems merely a poetical epithet. **143** *demum*: comp. 486 *solido vincunt ea corpore demum*; Aen. I 629 *hac demum voluit consistere terra*. **144** *praepand. lum.* Lamb. explains 'δᾳδουχεῖν, praeferre faceis: praeferendo faceis lumen aperire. uno verbo Latino *praelucere*'; and comp. V 657 *auroram differt et lumina pandit*; Cic. Arat. 40 *hiberni praepandens temporis ortus*.

146—158: this terror and darkness of mind must be dispelled by the knowledge of nature; whose first principle is 'nothing can be produced from nothing by divine power': from this truth all the rest will follow. **146 147 148**: these verses are repeated in the 2nd 3rd and 6th books, and form in fact the keystone of epicurean physics: the knowledge of nature is desirable not for itself, but in order to overthrow ignorance and superstition: Epic. says himself in his 10th *κυρία δόξα* ap. Diog. Laert. X 142 *εἰ μηθὲν ἡμᾶς αἱ περὶ τῶν μετεώρων ὑποψίαι ἠνώχλουν καὶ αἱ περὶ θανάτου μήποτε πρὸς ἡμᾶς † ἐστι,...οὐκ ἂν προσεδεόμεθα φυσιολογίας*: Cic. de fin. I 64 the epicurean Torquatus says *Sic e physicis et fortitudo sumitur contra mortis timorem et constantia contra metum religionis et sedatio animi omnium rerum occultarum ignoratione sublata*. **146** *igitur*: well then to come to my subject, difficult as it is in Latin: and the *terrorem animi tenebrasque* refers to all he has said in 62—135. **147** *luc. tela*, though connected by the disjunctive *neque*, are the *radii solis*: comp. 479 *Non.. constare neque esse*. **148** *species*, the outward form and aspect: cf. 950 *Naturam rerum qua constet compta figura*: [comp. Manil. I 35 *et veneranda Non species tantum sed et ipsa potentia rerum*.] *ratio* is the inner law and principle after which nature develops itself, *naturae ratio* being a translation of Epicurus' *φυσιολογία*. **149** *cuius* i.e. naturae: it is monosyll. also in Lucilius, and Virg. catal. 11 35 *Non cuius ob raptum*, as is *eius* in Cic. Arat. fragm. XIV *Atque eius ipse manet*: and this is the usual scansion of *cuius* and *eius* in the scenic poets. *exordia sumet*: V 331 *neque pridem exordia cepit*: Cicero has *exordium ducat*: the metaphor is doubtless from beginning a web: see Forc. s. v. *ordior* and *exordior*: the same metaph. is kept up in 418 *ut repetam coeptum pertexere dictis*, and VI 42 *inceptum pergam pertexere dictis*: the auctor ad Heren. II 42 quotes from an old poet *Nunc ego te ab summo iam detexam exordio*: id. III 11 *principium sumetur aut a*; IV 19 *principia sumuntur*; Aen. IV 284 *quae prima exordia sumat*; all of them perhaps pointing to the same metaphor. **150** so Diog. Laert. IX 44 of Democritus, *μηδὲν ἐκ τοῦ μὴ ὄντος γίνεσθαι*. Aristotle again and again declares this to be common to all physiologists: Lucr. adds to the definition *divinitus* and just below *divino numine*, because this is the fruitful source of religious fears. See Tyndall, Fragments of Science p. 91, 'One fundamental thought pervades all these statements, there is one tap root from which they all spring: this is the ancient maxim that out of nothing nothing comes, that neither in the organic world nor in the inorganic is power produced without the expenditure of other power'. *nilo*: *nil* is always a monosyll. in Lucr., *nilum* and *nilo* are always dissyll. as is proved by this, that in most cases they must be, in all cases they may be of this quantity; and in no case need be dissyll. and trisyll. respectively. After the usual fashion of mss. A and B with hardly an exception write *nihil*, *nihilum*, *nihilo*: see Lachmann's precise note, who shews that Virgil in reality uses *nihil* only twice as a dissyll. **151** *continet* seems to be used as in Quint. I 3 6 *quosdam continet metus, quosdam debilitat*; Livy XXX 20 5 *quae pauca magis metu quam fide continebantur*: Lexicons give other instances. **153** *Quor. operum*: see n. to 15. **156** (157) *quod sequimur* Bentl. explains by *τὸ ζητούμενον, τὸ ἀπορούμενον*, as VI 808 *ubi argenti venas aurique secuntur*: comp. Cic. ad Att. III 16 *si spes erit, Epirum; sin minus, Cyzicum aut aliud quid sequemur*; X 18 2 *Formias nunc sequimur*; XII 27 1 *sequor celebritatem*; Aen. IV 361 *Italiam non sponte sequor*. **157 158** (158 155) *et—et*—explain *quod sequimur*: these two verses therefore merely state in other words *Nullam rem e nilo gigni divinitus*. **158** (155) *quaeque* is neut.: comp. 57. *opera sine divom* is said perhaps with reference to Accius 159 *Nam non facile sine deum opera humana propria sunt bona*.

159—214: if things could arise from nothing, any animal might be born any where, any fruit grow on any tree. But that every thing is produced from a definite seed is proved in many ways: flowers corn fruits come at stated seasons: again animals and plants require time to grow up: the products of the earth want rain at stated times, animals food: men are of a definite size, and never grow to a gigantic bulk: lastly the fruits of the earth require cultivation, and do not improve spontaneously. —From the nature of the case this is rather a full statement of what he means by nothing coming from nothing, than a proof: his theory of fixed unchangeable seeds of things or atoms he subsequently demonstrates with great clearness and power: some of his arguments even Newton seems not to have disdained to borrow. **159** almost a transl. of what Epic. himself says in his letter to Herod. Diog. Laert. X 38, quoted by Lamb. and others, *οὐδὲν γίνεται ἐκ τοῦ μὴ ὄντος· πᾶν γὰρ ἐκ παντὸς ἐγίνετ' ἂν σπέρματός γε οὐθὲν προσδεόμενον*. **161** *mare*: this abl. is common in Ovid, and is found in Plautus who puns on *amare* and *a mare*, and in both the Varros: see Neue Formenl. I p. 233 and Priscian and Charisius quoted there. Ovid has *caeleste bimenstre* and more than once *rivale*, Lucan *natale*: comp. 1013 *simplice* and II 635 *pernice* and n. there: see also the instances given by Mommsen, Hermes I p. 466 § 3: the antiquarian Fronto, ad M. Caes. III 13, recalls *in mare*. *primum* followed by no *deinde* or other particle: VI 1068 *Saxa vides primum* cet.: this form of expression is common enough in Cicero and others; as Ter. Andr. 211; Virg. geor. III 384; Juv. II 4: see too Madvig de fin. I 17. **162** is *squamigerum*

nom. sing. or gen. plur.? for the former you have *mortale*, *humanum genus* and the like; but Lucr. also says *hominum genus* cet. and elsewhere he uses the word only as a subst., *squamigerum pecudes* occurring twice: Lamb. marks it as a gen.: there is the same ambiguity in Aen. III 221 *Caprigenumque pecus*; with which Macr. sat. VI 5 14 compares *caprigenum trita ungulis* of Accius, and *caprigeno pecori* of Pacuvius; from whom Cic. prognost. fr. 6 borrows *caprigeni pecoris*. V 1156 *divom genus humanumque* shews how indifferently Lucr. uses both constructions: III 73 the gen. *consanguineum* seems a harsher contraction than *squamigerum*; or IV 586 *genus agricolum*, or *Aeneadum*: see also n. to V 727 *Chaldaeum*. Cic. orator 155 156 quotes some harsh instances from the old poets and then points out when use admits or requires the contraction: he allows himself, he says, to use either *pro deum* or *pro deorum*; but only *trium virum*, *sestertium*, *nummum*, 'quod in his consuetudo varia non est, planeque duorum virorum iudicium aut trium virorum capitalium aut decem virorum stlitibus iudicandis dico numquam'. **163** *arm. at. al. pec.* may be looked upon as one clause in appos. with *gen. om. fer.* **166** Virg. geor. II 109 *Nec vero terrae ferre omnes omnia possunt*: the expression is prob. almost proverbial, like *non omnia possumus omnes*. **167** *Quippe* is here joined with 168 *Qui*: *ubi—cuique* being a separate clause: so 242 *Quippe* belongs to *quorum*: *ubi—corpore* being a separate clause: but 182 *Quippe ubi* are of course connected: he never cares to avoid such ambiguities of construction. **169** *At nunc*, very common in Lucr. when he is passing from what is not to what is true; also 221 *quod nunc*, 675 *Nunc igitur*; 110 and VI 570 *Nunc*, alone: *nunc, nunc autem, nunc vero* are thus used by Cicero; and *nunc* is common in Livy. **170 171** for constr. comp. n. to 15. *inde ubi*=ex eo, in quo. **171** *materies* and *corpora prima* are of course synon.; see n. to 55 foll. **172** common as *quare* is in Lucr., this is the only instance of *hac re*= hanc ob rem: Cicero uses *ea re*; but we find *hac re* in Balbus ap. Cic. ad Att. IX 7 B 2; Balbus and Oppius ib. A 2; Mela I 54; II 63; 97; III 31; Sen. epist. 9 9 twice; Phaedr. IV 10 4; Priap. 13 4. [See also Cic. epist. VIII 11 2 *quibus hac re* ('on this account', 'for this purpose') *ad intercessionem evocandam interpellantibus*: see Madv. adv. cr. vol. 3 p. 161 where the sentence is amended.] **173** *secreta* means distinct and peculiar to each.

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it; and perhaps Cicero means *loquebamur* to contrast with *scribebamus*. Lucretius' frequent employment of this archaism, after it had been generally dropt, may be one of the reasons which made Cicero deny him *ars*, if indeed he did deny it him: see introduction p. 17 foll. **187** probably he meant the rhythm to be an echo of the sense. *arbusta*: as *arbores* cannot come into the verse, Lucr. always uses for it *arbusta* in the nom. and acc.: but as *arboribus* is suitable enough and often used, in the only instance of *arbustis*, v 1378, the word has its ordinary meaning of plantations of trees. **188** *quando* in the sense of *quoniam* or *quandoquidem* and always governing an indic. is oftener employed by Lucretius than in the temporal sense; and is common in the older writers: Madv. de fin. v 21 and 67 allows it also in Cicero. With 188—190 comp. II 707 *Quorum nil fieri manifestum est, omnia quando Seminibus certis certa genetrice creata Conservare genus crescentia posse videmus*: that there is a hiatus here such as I have suggested I feel certain, and I believe I have given almost the words of the author: comp. too 180 *Quod si de nilo fierent, subito exorerentur, Incerto spatio atque alienis partibus anni*: where the opposite is stated, *paulatim* contrasting with *subito*, *tempore certo* with *Incerto spatio* cet. How any critics should now maintain as Wak. maintained, that the passage is complete as it stands and that *crescentes=res crescentes* I cannot understand: see n. to 57. **191** *grandescere*, used twice again by Lucr. and by Cic. prognost. fragm. 5.

192 *Huc accedit uti*, a prosaic but very common phrase in Lucr.: also *h. ac. item quod*. **197** he several times repeats this comparison of the elements of words with the elements of things, led to it doubtless by the common name. It is a favourite and natural artifice of his to give colour to his arguments on abstruse matters by illustrations from things visible or intelligible to all: to this we shall often have occasion to draw attention. **200** *per vada*: the deep sea being but a ford to them. **202** perhaps one of the 3 cases where *saecla* in Lucr. has its ordinary sense; the other two being III 948 and 1090: see n. to 20 *saecla*: so that *vit. saecla* will here mean the number of years over which a life, probably a human life, extends: comp. Virgil's imitation in geor. II 295 *Multa virum volvens durando saecula vincit*; and Aen. XI 160 *vivendo vici mea fata*: in all these cases the alliteration has influenced the phrase. **207** *Aeris...auras* and *aeriae aurae* are very favourite pleonasms for *aer* in Lucr. *teneras*: II 146 *Aera per tenerum*: the air has the same epithet in Ennius Virgil and Ovid: it implies what is soft yielding elastic: comp. Ov. trist. III 8 7 *tenera nostris cedente volatibus aura* and Cic. de or. III 176 *nihil est enim tam tenerum neque tam flexibile neque quod tam facile sequatur quocumque ducas, quam oratio*, where it has the same force; as also orator 52: de nat. deor. II 65 he translates by *aethera, Qui tenero terram circumiectu amplectitur* the αἰθέρα, Καὶ γῆν πέριξ ἔχονθ' ὑγραῖς ἐν ἀγκάλαις of Euripides. **209** *manibus* is the abl.

instr., by manual labour, = II 1165 *manuum labores*: Cic. de off. II 13 *sine hominum labore et manu*; 14 *sine hominum manu atque opera*. *mel. red. fet.*: comp. Cic. de orat. II 131 *quo meliores fetus possit et grandiores edere* (*ager*): *reddere* is regularly used in this sense. *fetus* with one exception always in Lucr. means the produce of the earth or trees. **210** *videlicet* has here the construction of *videre licet*: so II 469 *Scilicet esse globosa*: the same constr. is found in Plautus, Terence, Sallust, once in Cicero, ad Att. v 11 7, and in the antiquarians Fronto and Gellius: on the other hand Lucr. II 809 *Scire licet.. putandum est*, uses *scire licet* for *scilicet*. **211 212** repeated with slight change v 210 211. *cimus* he uses only in these two places, *ciere* being the com. form: III 303 *percit*; VI 410 *concit*; II 327 *excitur*: he also has *excĭtus*. **213 214** if there were no first-beginnings, things might be much worse or much better quite independently of our control.

215—264: nothing can be reduced to nothing: things dissolve into their first-beginnings: if this were not so, a thing might pass away in a moment without any force: again how could all things, animate and inanimate, be replenished? if nothing were imperishable, infinite time past must have reduced all things to nothing: a mere touch would destroy all things alike: rains pass away; but the earth which receives them sends forth her produce; and from it all animals are nourished: nothing therefore is utterly destroyed. **216** Epic. after what is quoted at 159, continues καὶ εἰ ἐφθείρετο δὲ τὸ ἀφανιζόμενον εἰς τὸ μὴ ὄν, πάντ' ἂν ἀπολώλει τὰ πράγματα, οὐκ ὄντων τῶν εἰς ἃ διελύετο. *dissoluat*: as in 3 places, I 559 III 706 VI 446, this word must be of 4 syllables from the necessity of the metre, Lucr. never ending a verse with 3 spondees, I have followed Lach. in so regarding it in those places also where it might be a trisyll. as here for instance; though it is of course a doubtful point. *interemat* and 226 *peremit*: A and B, as all good mss. of all good authors, invariably thus spell these words; as also *neglego* and *intellego*. **217** *Nam*, **219** *enim*: Lucr. does not at all avoid thus using *nam, enim*; *nam, nam*; *enim, enim*, and the like in consecutive sentences, as the Greeks use γάρ: occasionally we find them in three successive clauses: II 749 *enim*, 751 *enim*, 753 *Nam*; III 754 *enim*, 756 *enim*, 757 *enim*; v 7 *Nam*, 13 *enim*, 14 *Namque*: thus Cicero ad Att. II 3 2 has *nam—etenim—enim—nam* in 4 consecutive short sentences; and XVI 6 2 *enim—enim—enim* in 3. **221** *Quod nunc*: see n. to 82 *quod contra*: and comp. Varro de re rust. III 3 8 *quod nunc, ut habeant multos apros ac capreas, complura iugera maceriis concludunt*; Cic. de fin. I 67. *nunc*: see n. to 169. *aet. const. sem.*: Madv. Cic. de fin. IV 19 says that Cic. never has the simple abl. after *consto* but always *ex*: in Lucr. the former is very frequent; more so than the latter: he also employs both constructions with *consisto*. [He has also IV 1229 *de semine constat*; see Draeger hist. synt. vol. I p. 515:

comp. too n. to I 420.] 222 *Donec vis obiit*=exactly 246 *dum*.. *Vis obeat*: *donec* and *donique* 'until' in Lucr. take an indic. with the exception of IV 997 *Donec*.. *redeant*; and this is the usual constr. in the older writers: the word is scarcely found in Cicero, though *usque eo, donec*.. *venimus* has been pointed out to me in the Verr. (2) I 17: V 178 *donec* is 'so long as': in II 950 I am inclined to take *solvit* to be a perfect, with a change of constr. in next v.: the tense of the indic. will then always be the perf. except V 997 *Donique privarant*, where the pluperf. seems to be an attraction of the prec. imperfects. For the usage of Tacitus, who employs the word very often, see Woelfflin in the philologus vol. 27, p. 127. 224 *videri* here has the force of *esse*, which φαίνεσθαι so often has in Greek: 262 it has its usual sense of 'to seem', and 270 it is a simple passive of *video*: Lucr. uses homonymes in this way again and again without its appearing to strike him that there can be any ambiguity: we meet for instance in the same or in contiguous vss. with *corpora* in its ordinary sense and in that of atoms; as II 714 *multaque caecis Corporibus fugiunt e corpore*: *res* and *ratio* are likewise found with quite different meanings. 227 *lumina vitae* occurs again more than once; it is also used by Virgil. 228 *Redducit* always has this quantity in Lucr. and generally this spelling in AB: the same is true of *reccidere* which occurs thrice, *redducere* occurring four times: the ancient and sole ms. of the last 5 books of Livy has *redducit, redducendi, redducturum*, but *reductum*; Plautus and Terence always *redduco*, at least where the verse shews the quantity: comp. *reddo*: but Menaech. 520 *rĕcident*; whereas Ovid Propertius Juvenal (Virgil does not use the word) have *reccido*; but most hexameter and other poets *reduco*: the perf. *reppuli repperi rettuli reccidi* are of course necessarily long. 230 *ingenuei* is almost *sui*: comp. VI 613 *Adde suos fontis* of the sea: Auson. Mosell. 65 *sub ingenuis agitatae fontibus herbae*: Plaut. miles 632 unites *sua sibi ingenua indoles*, i.e. nativa. *externa* is the opposite of this, 'which come from without', *adventicia*: comp. Cic. de nat. deor. II 26 *Nec enim ille externus et adventicius habendus est tepor, sed ex intimis maris partibus agitatione excitatus*: Livy IV 30 7 *nec caelestes modo defuerunt aquae, sed terra quoque ingenito umore egens vix ad perennes suffecit amnes*: where *caelestes* and *ingenito* are contrasted, as *ingenuei* and *externa* here: comp. too Juv. III 20 *nec ingenuum violarent marmora tofum*, who was prob. thinking of Ov. met. III 160 *levibus tofis nativum duxerat arcum*. Sense and context so imperiously require *mare* to be the accus. after *supped.* that I now concede it, my attention having been directed to Cic. in Catil. II 25, *si omissis his rebus quibus nos suppeditamur, eget ille*; which Halm ad l. says is the sole instance in Latin of this constr. and which is confirmed by Arusianus Messius who quotes it in support of 'suppeditor hac re'. This constr. in Cicero and Lucr. may be an example of what was more

common in the older Latin; for Plautus, Terence etc. often have an accus. for a dat. after *indulgeo, inservio, parco, ignosco*, etc. as *te indulgebant, unum inservire amantem*: but probably II 568 *unde omnia suppeditantur*; 1167 *vix arvis suppeditati* is the same constr. *longe*: Livy XXV 12 9 *vomicamque quae gentium venit longe*, from a carmen of Marcius; Cic. ad Att. V 2 2 *cum Hortensius veniret*.. *tam longe*; Mela II 30 *Strymon*.. *amnis est longeque ortus*; Aen. X 843 *Adgnovit longe gemitum*. 231 *aeth. sid. pas.*: comp. V 524, which mentions this as one of several possible cases; though it seems rather stoical than epicurean: comp. too Virg. Aen. I 608 *polus dum sidera pascet*. 232 *debet*: this word Lucr. employs with singular fondness in a very peculiar sense: to denote that which follows either as a natural or a necessary consequence: he applies it to all things alike, animate and inanimate: II 1139 *Omnia debet enim*.

233 *consumpse*: *sumpse* seems to occur in Naevius' triphallus, fragm. comic. 97: Lucr. III 650 has *abstraxe*, V 1159 *protraxe*; Virgil *traxe*, Horace *surrexe*, Catullus *promisse*; many others, *dixe* and the like, are found in Plautus: *cognosse remosse cresse* in Lucr. are simpler contractions like *nosse*: I 987 *confluxet*: comp. *vixet extinxem* in Virgil, *erepsemus* in Horace; the abundance of such forms in Plautus and Terence and the general use of *faxo ausim* shew that they belonged to the language of common life. *dixti* is found even in Cicero: see Madv. de fin. II 10. *diesque*: see n. to 557: the argument too of this v. is there more fully enforced: comp. too Cic. pro Cael. 77 *iam aetas omnia, iam usus, iam dies mitigarit*; Livy XXII 39 12 *meliores...nos tempus diesque facit*. 235 *haec rerum summa* i.e. the whole *mundus*: after his wont he has just enumerated what goes on in the three portions, earth sea heaven: on *rerum summa* see n. to 1008. 240 *indupedita* of course agrees with *materies*: comp. 244: Lamb. here errs as well as Wak.
241 Madv. Cic. de fin. II 84 says that *satis esset causa leti*=letum satis efficeret, and that the gen. *leti* makes a difference: [see too Draeger hist. synt. I p. 416 § 3:] in the passage of Cicero Madv. and Baiter in his new ed. read *satis est tibi in te...praesidii* for *praesidium*: auctor ad Heren. at beg. *vix satis otium studio suppeditare possumus*, where Madvig would read *otii*; ad Att. XII 50 *si satis consilium quadam de re haberem*, where Lamb. reads *consilii*: he also refers to Ovid met. III 149 *Fortunamque dies habuit satis* and Virg. Aen. XI 366 *sat funera fusi Vidimus*. In all these passages *satis* appears to me to have much the same force as in Lucr. 'in sufficient measure'; as well as in Sen. Herc. Oet. 1829 *reliquiae auxilium dabunt*: *Erunt satis praesidia*. [242 *nulla*=*nullae res*: comp. Hor. ars 324 *nullius*; Ov. met. 1 17 *nulli*; XV 242 *nullo*.] 245 *constant*=sunt, as so often in Lucr. 249 *corp. mat.* another term for his first-beginnings. 250 *pereunt*: the rains perish as rains; yet 262 *haud penitus pereunt*; but reappear in

other shapes. Comp. Virg. geor. II 325 *Tum pater omnipotens fecundis imbribus aether Coniugis in gremium laetae descendit et omnis Magnus alit magno commixtus corpore fetus*; and Aesch. frag. of Danaid. Ὄμβρος δ' ἀπ' εὐνάεντος οὐρανοῦ πεσὼν Ἔκυσε γαῖαν κ.τ.λ. which Lucr. may have had in view: see notes to parallel passage II 991 foll. and V 318 foll. From the Vedas to the pervigilium Veneris poets and philosophers love to celebrate this union of ether and earth, ether as the father descending in showers into the lap of mother earth. The notion naturally had birth in warm climates, such as India, where the excessive heat at stated periods seemed to bring the ether down in abundant rains which at once quickened all things: hence the Agni of the Rig-Veda cooperating with the mighty parents heaven and earth to shed abundant showers. This notion too has induced Lucr. here and elsewhere, where he speaks of *aetheriae nubes* and the like, to forget or suppress for a moment his calm cloudless unsullied ether, and confound it with this upper generator of heat and rain: the *semper innubilus aether* of III seems in VI *omnis in imbrem vertier*: other poets follow Lucr. and Virgil: Ov. met. I 269 *funduntur ab aethere nimbi*; fasti I 682 *aetheria spargite semen aqua*; III 286 *effusis aethera siccat aquis*; Sen. Hipp. 674 *omnis impulsus ruat Aether et atris nubibus condat diem*; Oed. 632 *nec parum pluvio aethere Satiata tellus*; [Val. Flacc. I 307 *si nubila duxerit aether.*] 'La peinture est renfermée dans un raisonnement' says Martha, p. 282, of vv. 250—264: his further remarks are eloquent and just.

252 *nitidae fruges* occurs five times: it seems to imply crops well-kept and so flourishing and good-looking: Cic. Ver. III 47 says *Quos ego campos antea collesque nitidissimos viridissimosque vidissem, hos ita vastatos nunc ac desertos videbam*; Virg. geor. I 153 *interque nitentia culta*. *fruges* in Lucr. either signifies grain-crops alone or includes leguminous products in contradistinction to fruits of trees etc. **253** Wakefield well observes that Virg. ecl. X 54 *Arboribus: crescent illae, crescetis amores*, imitates the language and rhythm of this verse, while the sense is quite different. Compare also with II 2, geor. I 158 *magnum alterius frustra spectabis acervum*; with II 32 and V 1395, geor. II 310 *Praesertim si tempestas*; with II 408 *et mala tactu*, geor. III 416 *aut mala tactu*; with III 232 *Tenuis enim quaedam...aura* and the various uses of *perlabitur* in Lucr., Aen. VII 646 *Ad nos vix tenuis famae perlabitur aura*; with IV 1065, geor. I 114 *Conlectum umorem*; VI 458 with geor. III 478 *coorta est Tempestas*: in each case the words are the same, the meaning is altogether dissimilar: comp. also Aen. XII 906 *vacuum per inane* said of the air; though Lucr. once, II 116, uses *per inane* himself in the same way. Such instances show how strongly this poem must have impressed itself on Virgil's mind. **256** *canere* = cantu resonare. Forc. and his followers cite but one instance at all similar, from the Aetna 297: comp. however Virg.

geor. II 328 *resonant avibus virgulta canoris*. With *videmus canere* comp. IV 598. **257** *pingui*: used as a subst. by Virg. geor. III 124 *denso pingui*: as well as catal. VII 4 *Scholasticorum natio madens pingui*: it often occurs in Pliny nat. hist. **258** *Corp. dep.*: Bentl. says 'scil. cum parturiunt': can he mean that *corpora* are the young of the cattle, as he reads in 257 *fetae*? of course Lucr. means merely what Virg. Aen. VII 108 does, *Corpora sub ramis deponunt*, or Hor. od. II 7 18 *fessum militia latus Depone*: Ov. met. I 300 *ponunt sua corpora phocae*. *can. lac. um.*: the two epithets are quite regular, as *lac. um.*=simply *lac* or *lactis umor*, and *candens* is an epith. ornans, as in γάλα λευκόν: comp. I 945 and IV 20 *suaviloquenti Carmine Pierio...Et quasi musaeo dulci...melle*; V 1194 *O genus infelix humanum*; VI 387 *fulgentia caelestia templa*: and Virgil's *toris genialibus altis, corpus exangue Hectoreum, sinusque crepantis Carbaseos*; Catullus' *lepidum novum libellum; horridamque Thraciam Propontida, trucemve Ponticum sinum*; Propertius' *pugnamque sinistram Cannensem*: comp. too II 342 *mutaeque natantes Squamigerum pecudes*; and see n. to V 13 *divina antiqua reperta*, where the instances are somewhat different. Lucr. is fond of this periphrastic use of *umor*: he has *umor aquae, aquai, aquarum, sudoris*, some of them repeatedly: *lacteus umor* occurs more than once in Ovid. **260** *Artubus*: this form is retained by our mss. in four other places: once only, V 1077, we find *artibus*: doubtless the *u* remained longer in this than in other words, to distinguish it from the dat. and abl. of *ars*: see Neue I p. 372—376 for the statements of the old grammarians. **261** *perculsa*: see n. to 13. **262** *videntur* i.e. perire. **263** *alid* Lucr. uses not unfrequently; *ali* the dat. sing. more than once, but *alis* never: Catullus has *alid*, and *alis* nom. **263 264** Lucr. is fond of this doctrine that the death of one thing is the birth of another and that the uniformity of nature is thereby maintained. We shall have to say more at II 70 of this theory as applied to the universe of things: as here applied to this world of ours it is hardly perhaps consistent with what is said 556, that the process of destruction is much quicker than that of construction. Elsewhere too he argues at great length and with much earnestness that this world is of quite recent formation, and again that it not only can but must and will be destroyed in a moment of time. What becomes then of this unvarying equality, at least thus unconditionally applied, *nec ullam Rem gigni* cet.? Lucr. doubtless had in his thoughts the old dogma of the physici, more than once asserted by Aristotle, as metaph. II 2 p. 994 b 5 ἡ θατέρου φθορὰ θατέρου ἐστὶ γένεσις.

265—328: doubt not what I say of first-beginnings, because they are not seen: many things in being you know by their effects, yet cannot see: winds work mischief in sky, on earth and sea; yet are not seen: they act by pressure just like rivers which are seen: smells, heat, cold, sounds are not seen; yet have all body since they are in contact with sense: moisture leaves

clothes without being seen: metals stones wear away; things grow, and decay, as rocks from seabrine; yet the process of growth and decay is unseen in all. 265 *Nunc age*, a not unfrequent formula in Lucr. by which he bids his reader to give heed, when he is passing to a new question: it is used more than once in the same way by Virgil, and often by Manilius: Cicero has *age nunc*: comp. too Empedocles 248 Karsten Νῦν δ' ἄγ' ὅπως...τῶνδε κλύε and 182 Εἰ δ' ἄγε, νῦν τοι ἐγὼ λέξω, and 101 'Αλλ' ἄγε μύθων κλῦθι, and 124. 270 *videri* = 268 *cerni*: a sense common in Lucr., not very unusual in Cicero; as de off. III 38 *ibi cum palam eius anuli ad palmam converterat, a nullo videbatur, ipse autem omnia videbat; idem rursus videbatur, cum in locum anulum inverterat*: ib. I 14 he translates the ἐναργές κ.τ.λ. of Plato by *si oculis cerneretur*; de fin. II 52 by *si videretur*: Caes. de bell. civ. III 36 8 *ut simul Domitiani exercitus pulvis cerneretur et primi antecursores Scipionis viderentur*. 271 *portus*: the wind beats against them and prevents all ingress to ships; rendering them therefore more dangerous than the open sea. This so careful an observer as Lucr. would doubtless understand. [Elgin Courant, Dec. 22 1876: 'the steamer Tyne entering Shields harbour yesterday went ashore. All hands were lost...More shipping disasters are reported from Shields. The steamship Blenheim of Hartlepool, in entering the harbour, went against the end of the south pier and afterwards broke in two. Afterwards the steamer New Cornwall of Barnstaple, making for the harbour was overwhelmed by the sea and foundered, all hands being lost'.] 272 *ruit* used 289 and 292 in same sense: Plautus and Terence appear each to use it once and only once actively; Virgil more frequently. Virg. geor. III 197 has *arida differt Nubila*. 274 *montis supremos* is found in Virg. geor. IV 460. 275 *Silvifragis*: 305 *fluctifrago*: Lucr. seems the only classic who uses these words, which are both active. *perfurit Cum frem. saev. murm.* a striking tautology; unless indeed, as I sometimes think, the *pontus* of mss. can be defended, *saevit—pontus* being a clause apart and finishing the comparison in a way so often followed by Virgil; as geor. I 334 *Nunc nemora ingenti vento, nunc litora plangunt*, which may indeed be a reminiscence of Lucr.: comp. too Hor. epod. 13 2 *nunc mare, nunc siluae Threicio Aquilone sonant*. *cum fremitu* or *fremitu*, *murmure* or *cum murmure*, all equally Latin: IV 539 *cum summost clamore profusus*; but VI 147 *magno clamore trucidet*; 1284 *ingenti clamore locabant*: Enn. ann. 477 *Cum magno strepitu Volcanum ventu' vegebat*; Plaut. Amphitr. 244 *maximo Cum clamore involant*. 277 *nimirum* = ne mirum = non mirum acc. to Donat. Ter. eun. 508 'solve *nimirum* [a proof by the way that he wrote it as one word] et fac *non est mirum*... nam *ni ne* significat et *ne non*. *ni* pro *ne* Vergilius, *laeti discrimine parvo Ni teneant* [and Lucr. he might have added: see n. to II 734]. *ne* pro *non* Plautus, *nevult* inquit pro *non vult*': but as *mirum ni*, *nisi*,

mirum est ni, *mira sunt ni* have much the same force in Plautus, Terence, Caecilius, etc., Ribbeck, Beitr. z. l. v. d. Lat. partik. p. 17, is prob. right in saying that *nimirum* = *ni* or *nisi est mirum*: Caecil. 254 *nomen virginis, nisi mirum est, deintegrabit*. Lucr. is peculiarly fond of this word: he generally employs it in drawing what he thinks a certain conclusion from what precedes. *corp. caeca*, as 295: sometimes he applies the phrase to his invisible first-beginnings; as 328 *Corporibus caecis* = 1110 *primordia caeca*. 278 *denique* often thus added to the last item in an enumeration without giving it any prominence over the others; as 435 *Augmine vel grandi vel parvo denique*, II 1081 *sic montivagum...Sic hominum...sic denique mutas Squamigerum* cet.; IV 783 *Si mare, si terrast cordi, si denique caelum*; V 434 *Nec mare nec caelum nec denique terra neque aer*. 279 *Verrunt*, a favourite metaphor which he uses five times. 280 *Nec rat. alia...Et cum*: II 414 *Neu simili...cum ...Et cum*; 418 *Neve...simili constare...qui...Et qui*; IV 544 *Nec simili ...Cum...Et validis...Cum*; V 1073 *non differre...ubi...Et...Et cum*; 1081 *alias...voces...Et quom*; III 1092 *Nec minus ille...et ille*: in most of these cases the *et* of comparison is followed by *c* or *qu* or a vowel: see Haupt obs. crit. p. 36, who shews that Lucr. like Virgil never has *ac* before *c g* or *qu* with one exception, VI 440 *simul ac gravidam*, as *simul ut* was not used by him: *simul ac* foll. by *c* is the sole exception to the rule in Catullus and Ovid: it is observed by Propertius: Livy often neglects it. 281 foll.: there are three similes in the Iliad, Δ 452, E 87, Λ 492, each of which, especially the two last, Lucr. may here have had in his mind: ποταμῷ πλήθοντι ἐοικὼς Χειμάρρῳ ὅστ' ὦκα ῥέων ἐκέδασσε γεφύρας· Τὸν δ' οὔτ' ἄρ τε γέφυραι ἐεργμέναι ἰσχανόωσιν, Οὔτ' ἄρα ἕρκεα ἴσχει ἀλωάων ἐριθήλεων Ἐλθόντ' ἐξαπίνης, ὅτ' ἐπιβρίσῃ Διὸς ὄμβρος and πλήθων ποταμὸς πεδίονδε κάτεισιν Χειμάρρους κατ' ὄρεσφιν ὀπαζόμενος Διὸς ὄμβρῳ, Πολλὰς δὲ δρῦς ἀζαλέας πολλὰς δέ τε πεύκας Ἐσφέρεται. Virg. Aen. XII 523 *ubi decursu rapido de montibus altis* cet. was thinking of 283; and so was Spenser, faerie queene II 11 18 *Like a great waterflood that tombling low From the high mountains* etc. 281 Lamb. joins *mollis* with *aquae*, but I think the usage of Lucr. requires it to agree rather with *natura*; as II 232 *corpus aquae naturaque tenvis Aeris*; V 148 *Tenvis enim natura deum*; II 646 *Omnis enim divom natura*, where see note. *natura aquae* = simply *aqua*; so *natura animi*, *deum*, and the like again and again: so that the relative may be referred to it, as well as to *flumine*. 284 *coniciens* is used in its first meaning also VI 731 *Nubila coniciunt in*; and so *coniectus* the particip. more than once. 287 *Molibus* are of course the piers of the bridges; and *grandia saxa* in 289 are the stones of these and the other parts of the bridges swept away by the flood. *validis cum viribus* occurs in Enn. ann. 301: Virg. Aen. V 368 has *vastis cum viribus*; Cic. Arat. 146 *funestum magnis cum viribus amnem*, which Lucr. may have

had in mind: 195 Cicero writes *validis viribus austrum* without *cum*. vi 73 *placida cum pace quietos*, 279 *ipse sua cum Mobilitate calescit* are like in principle; and vi 1233 *maesto cum corde iacebant*: Cicero in his Aratea quite revels in this use of *cum*: in the few hundred lines which remain I have counted 23 instances more or less similar to those quoted. **288** *dat stragem*: see n. to iv 41. *sub undis...volvit* is found in Aen. i 100. **289** *quicquid*, with *c*, = quicque: it is an archaism not uncommon in Lucr. who has *unum, primum, summum quicquid*: it is found in Plautus, and is not unknown to Cicero: see Madvig de fin. v 24: nor to Livy, as xxxviii 17 13 *in sua quicquid sede*. For the constr. see note to 15: it = qua aliquid fluctibus obstat, id ruit amnis: comp. n. to 966 *quem quisque locum possedit*. With *qua quicquid* comp. v 773 *Qua fieri quicquid posset ratione*; iii 787 and v 131 *ubi quicquid*: comp. too Aen. vii 400 *io matres, audite, ubi quaeque, Latinae*: Plaut. Bacch. 252 I would read *Istius hominis ubi fit quaeque* (*quaque* mss. *quomque* Lamb. Ritschl Fleckeisen) *mentio*: Livy ix 23 15 *qua potest quisque*; Sall. Iug. 44 5; 51 1 *ubi quemque periculum ceperat*; 60 1 *ubi quisque legatus aut tribunus curabat*; [Cat. 56 2 and 3: Plaut. Amph. 1064 *ubi quemque hominem aspexero...optruncabo in aedibus*; 1079 *Ubi quisque institerat, concidit strepitu*; asin. 244 *exobsecrabo ut quemque amicum videro*.] **291** *procumbit* is used of the wind in same sense vi 558. **293** Virg. Aen. vii 567 has *torto vertice torrens*, and Lucr. is purposely using terms common to rivers and winds. *vertice torto* and *rotanti turbine* seem to be the same thing; and the tautology is like that in 275. **296** *moribus*: Virg. geor. i 51 *Ventos et varium caeli praediscere morem*; which Pliny xviii 206 thus expresses *quippe Vergilio iubente praedisci ventos ante omnia ac siderum mores*. **297** *aperto* the opposite to *caecus*.

300 *tuimur*: also *tuantur tuĕre* are found in Lucr. and *contuimur*: the older writers frequently form this verb and its compound acc. to this conjug.: comp. *cimus* above. **301** *Usur. oc.*: iv 975 *sensibus usurpare*. Plautus too has *neque oculis neque pedibus neque oculis usurpavi*: see Forc. **306** *eaedem, eādem* and *eodem* are found as dissyll. in Lucr.: *idem* (plur.) and *isdem* are always diss.; but *eădem eandem eundem*, where the vowel is short by nature, are always trisyll.: *eosdem easdem* do not occur in Lucr.: they might be either diss. or trisyll. *dispansae*: *dispessus* is also used by Lucr. *serescunt*: this passage is quoted by Nonius 175; and it seems to be the only known use of the word: *serenus* is clearly connected with it and Nonius adds 'inde Vergilius docte geor. i [461] *unde serenas Ventus agat nubes*', having just explained *serescit* by *siccatur*. **307** *umor umidus umecto* and *umerus* are rightly read in AB. **311—314** comp. Ov. ars i 473 *Ferreus adsiduo consumitur anulus usu. Interit adsidua vomer aduncus humo*. **311** *solis annis*, because the annus was made by the revolution of the sun: Varro de ling.

Lat. vi 8 'tempus a bruma ad brumam, dum sol redit, vocatur annus, quod ut parvi circuli anuli, sic magni dicebantur circites ani, unde annus'; but in Lucr. the coming together of *annis* and *Anulus* is quite accidental: v 644 *Quae volvunt magnos in magnis orbibus annos*, of stellar years. **312** *anulus*, not *ann*. *habendo* has not the same subject as the sentence: so Virg. geor. ii 250 *lentescit habendo*; Lucil. xxx 132 Muell. *quod prosit habendo*: comp. iv 1102 *Nec satiare queunt spectando corpora coram*; 1068 *Ulcus enim vivescit et inveterascit alendo*; and Virgil's imitation, geor. iii 454 *alitur vitium vivitque tegendo*: v 1369 *indulgendo blandeque colendo* of the earth; Plaut. asin. 222 *Bene salutando consuescunt, compellando blanditer, Ausculando*; Livy xxii 19 10 *raptimque omnia ac praepropere agendo...nautica ministeria impediuntur*; xxix 2 1 *ne glisceret prima neglegendo bellum*; xlii 17 7 *se daturum, quod nec in dando nec datum ullo signo deprendi posset*; viii 11 1 *praeferendo*; vii 2 6 *usurpando*; Ter. Phorm. 1034 *accusando*: [see Kuehnast Liv. syn. p. 20 21 and references, and Roby gramm. pt. ii p. lxi foll.] **313** *Stilicidi*: Lach. in a masterly note shews that when a long vowel is followed by *ll*, one *l* is withdrawn when an *i* follows, if this *i* be not merely the mark of a case, as *villa villis*: thus *Messalla Messalina*; *mille milia*; *villa vilicus*; *stilla stilicidium*; for *stiria* shews that the *i* of *stilla* is long. According to this rule *Polio* is right, and Servius recognises both *Polio* and *Pollio*, and Πωλίων is the usual Greek form; but Roman usage seems to have declared for *Pollio*; in the new corpus inscr. Lat. vol. i *Pollio* is found 6 times, *Polio* once; in Mommsen's inscr. reg. Neapol. always *Pollio*; and so the mss. of Virgil; but Pal. and Med. fail in the four places where his name occurs; *Pollio* too the collated mss. of Horace; the Pith. of Juvenal vi 387 and vii 176 *Polio*, ix 7 *Pollio*; the palimpsest of Fronto twice *Polio*. Augustus in his res gestae has one striking violation of this law: he always writes *millia millibus milliens*; and one or other of these words occurs more than 20 times: he probably so spelt from some notion of consistency; comp. his *sīmus* for *sumus*: *milites militare* etc. he spells in the usual way. While in a fine consular inscription of U. C. 622, corp. inscr. Lat. i 551, we have *miliarios* and twice *meilia*, ibid. 701 we find *millia*, 1012 *millibus*, shewing that the rule was not then quite fixed. **314** *occulte*: Forc. gives from Ovid an exactly similar use of the word. **315** *strata vi. Sax.* = stratas saxo vias: *strata* having the epithet *saxea* shews that Lucr. treated it almost as a subst.; even more harsh is vi 1283 *aliena rogorum extructa*. He uses this constr. more freely than most of the poets: see Conington to Aen. i 422: we had in 86 a very bold instance: *clausa domorum, extructa domorum*, and with a gen. sing. *vera viai, caerula caeli, sublima caeli* are some of many other examples. **316** *port. pr.*: Prof. Mayor refers me to Varro de ling. Lat. v 58 *quas Samothracia ante portas statuit duas virilis species aeneas, dei magni*: he

also points out that, Cic. Verr. IV 94, an *ex aere simulacrum* of Hercules in Agrigentum had its mouth and chin thus worn; and so Minuc. Felix describes Caecilius as kissing the lips of Serapis. Apul. met. XI 17 speaks of the people kissing the *vestigia* of Isis' silver statue, as to-day in St Peter's they kiss the toe of the bronze statue of St Peter. It may be presumed then that the Romans used the right hand of their statues, as Pliny says the Greeks used the chin. **318** the meaning is by the touch of the great numbers who in passing kiss: the words rather imply 'of those who often kiss': but it comes in the end to the same thing. **321** *praeclusit*: this verb he uses V 373 in its literal sense of shutting the door against. Prof. Conington and Mr N. P. Howard have independently pointed out to me that this v. is quite sound and requires only to be rightly understood: *videndi* is gen. after *natura*: Conington compares Persius V 101 *natura medendi*. *speciem* = visum: comp. IV 236, 242, V 707, 724: there indeed, as more than once in Vitruvius, it means *oculi visum*; here it means *visum rerum externarum*. **324** Cic. de nat. deor. II 142 *acies ipsa qua cernimus, quae pupula vocatur*. *contenta* is well explained by IV 802 and 809. **325** is rightly joined by Lamb. with what follows: Lach. wrongly connects it with what precedes. **326** *mare quae inpendent*: comp. Ter. Phorm. 180 *tanta te inpendent mala*; Lucilius *quae res me inpendet*, where Festus p. 161 9 says *me* is for *mihi*: IV 568 *non auris incidit ipsas*; where see note: so V 608 *accidere* has an accus. [Comp. Lucil. XXVI 51 *pectus inrigarier*.] *vesco*: Ribbeck, Lat. Partik. p. 10, seems rightly to make *vescus* = *ve escus*: it is he says both active and passive, 'nibbling' and 'nibbled off': he who eats without appetite takes little bites; hence *vescus* = fastidiosus, Paulus Festi p. 368, Gell. XVI 5 7, Nonius p. 186, Labb. gloss. *vescus*, ὀλιγόσιτος, ὀλιγοδεής, προσκορής: hence in Lucr. it means 'nibbling at and slowly eating away the rocks'. Again it is passive in Virgil's *vescum papaver* and *vescas salicum frondes*; and thus we can easily understand Afran. 315 *At puer est vescis inbecillus viribus*; Ovid fasti III 446 *vescaque parva vocant*, Pliny VII 81 *corpore vesco*, and Paulus Festi p. 379 '*vesculi* male curati et graciles homines'. **327** *possis* = precisely *potest* of 324: II 763 *possis*, 850 *Quoad licet ac possis*; where I now see Lach. to be wrong in reading *potis es*: see n. to II 41 *Cum videas*, and Madv. Lat. gram. 370 for this use of the indefinite 2nd pers. sing. conj. or potent.: the first ex. he quotes is like our passage in which *nec possis* = nec possumus: I 515 *Si non relinquas*; II 4 *quibus careas*; 36 *si iacteris*; 1090 *si teneas*; 220 *tantum quod dicere possis*; 763 and 768 *possis*; III 213 *cernas*; 370, 856, 960, 1024 *possis*; IV 319 320 *credas, recedas*; 325 *pergas*; 572 *cum videas, possis*; 957 *quem capias*; 1070 foll. *conturbes, cures, possis*; 1231 *possis*; VI 113 *possis*; 168 *videas*; 706 *Conspicias*; 708 *possis*; 1163, 1170 and 1257 *posses*; 1268 and V 1332 *videres*. **328** *Corp. caec.*: see n. to 277; and comp. Manil. I 131 *Caecaque materies caelum perfecit et orbem*, of the epicurean atoms. *gerit res*: the metaphor is taken from the government of a state: *res geruntur, geri res* and the like occur frequently in Lucr. always more or less with the same force: comp. Cic. de nat. deor. II 82 where the stoic Balbus says *nos cum dicimus natura constare administrarique mundum*.

329—369: but there is void as well as body in things; else there could be no motion, no birth, no growth: the hardest things can be penetrated; and therefore have void in them: again things of equal size are not all of equal weight, only because one contains more or less void than another. **329** the whole universe of things is not solid dense body; there is also void in things. *corporea natura* = corpore, as *animi natura, mundi natura* = animus, mundus, etc. *stipata*, a favourite word to express what is close packed, pressed, rammed together: Wak. well compares συμπιλεῖσθαι used in the same sense by Aristot. phys. IV 9 near beg. **330** *in rebus*, things in being, things formed, in contradistinction to the atoms: see n. to 419: Persius' parody I 1 *o quantum est in rebus inane* shews Lucretius' expression was in vulgar use: comp. also Pers. III 83 *gigni De nihilo nihil, in nihilum nil posse reverti*. *inane* his most general term for void, used as a subst.; the τὸ κενόν of the Greeks: he also uses *vacuum, vacuum inane, inane vacansque* and the like: *spatium, omne quod est spatium, vacuum spatium, locus, locus ac spatium* and the like express space in its extension, wherein things are and through which atoms move, = χώρα, τόπος: it is *intactile* or *manet intactum*; ἀναφὴς φύσις, as it is defined by Epicurus. **331** *Quod cognosse* = a nomin. subst. as shewn by *Nec sinet*: this use of the infin. is common in Lucr. as III 67, 354, 731, IV 765, 836 foll. 843 foll. V 979, 1118, 1250, 1297 foll. 1379, 1406, 1407, VI 380, 415, 416: Lucr. also uses the infin. for an accus. subst.: see n. to 418. **332** *quaerere*, as II 10 *viam palantis quaerere vitae*; and our 'to be to seek'. **333** *summa rerum*, properly the whole sum, universe of things, while *haec rerum summa* is this our single world, as explained in n. to 235; comp. n. to 1008 on *rer. sum.* **334**: see notes 1: I cannot conceive this v. to be genuine; it may have been interpolated by some one who did not see that 335, as well as 331, referred back to 330. **336** *officium, Officere*: one of his favourite plays on words, united with alliteration *obstare.. omni...Omnibus*; on which comp. what is said above p. 15: the words are simple homonymes, as in Cic. pro Sex. Rosc. 112 *cur mihi te offers ac meis commodis officio simulato officis et obstas*. **340** *subl. caeli*: see n. to 315. *sublima*: Enn. trag. 5 seems to have *sublimas*, and Accius *sublimo* and *sublimă*; Sall. frag. *sublima nebula*; Sen. Med. 1026 *sublimi aetheris*, and the antiquarian Apuleius met. IV 23 *sublimis volatibus*. [So Lucil. VIII 1 has *gracila*; see Mueller's note.] Lucr. uses more than once the adv. *sublime*, but never the adj. *sublimis*: II 845 *sterila*: II 621 *violenti* A Nicc. *violentis* B; V 1231 *violento* A Nicc. *violenti* B:

ex animus imbecillus hilarus inermus are the only forms he uses. **341** *mul. mod. mul.* a favourite formula of his for the reasons mentioned in n. to 336. **343** *sollicito*, an epithet he thrice gives to *motus*: Virgil applies it to *mare*, Ovid to *ratis*: Lucr. uses the verb more than once in similar senses. *priv. car.* seems very tautological: comp. 275 and 293. **345** whereas he assumes the inherent motion of his atoms as the first requisite for the production of things. **346** *solidus* is his technical word for what is perfectly solid and impenetrable, that is his first-beginnings; in this sense no *res* can be *solida*; only apparently so: all *res* or things in being are *rarae*, that is have a mixture of void in them. **349** *flent*: Virgil *inlacrimat*, Ovid *lacrimavit ebur*; for which Seneca Thyestes 702 has *flevit in templis ebur*: but in Lucr. of course there is no secondary implying of real weeping. **352** *totas* agrees with *arbores* implied in *arbusta* which, as is observed at 187, he always uses for the former: quite similar is VI 188 *Quam sint lata magis quam sursum extructa*, referring to *nubibus*; and on the other hand 215 *eas*, though 214 *nubila caeli* is the immediate antecedent, not *nubes*: 757 *quadripedes...ut si sint mactata*: for which Lach. unskilfully reads *fit mactatu'*; and not unlike is IV 933 *aeriis auris...eius*, where see note. **355** *rigidum* seems to personify cold as if it were stiff like frost. **356** *qua*: III 498 *Qua quasi consuerunt*; 736 *qua possint via nulla videtur*; Virg. geor. I 90 *vias et, Spiramenta, qua*; Aen. V 590 *Mille viis, qua*. **358** *alias aliis...res rebus*: he seeks by the collocation of the words to increase the force of the antithesis: comp. 816 *variis variae res rebus*: 876 *omnibus omnis Res.. rebus*; II 1166 *tempora temporibus praesentia confert Praeteritis*, and VI 1085 *Ut cava conveniant plenis haec illius illa Huiusque*; Livy XXXIX 16 4 *nunc illi vos singuli universos contionantes timent*. **360** *glŏmere*; but *glŏmerari glŏmerata glŏmeramen*; and Horace *Ut vinosa glŏmus*: Lach. gives many other instances of varying quantity; thus Lucr. and Plautus *cōturnices*, Ovid and Juvenal *cŏturnices*; Lucr. etc. *viētus*, Hor. *viĕtis*; Lucr. *văcillo* and *vaccillo*: see n. to II 452; III 504. **363** *inanis* is of course the gen. of *inane*, as 365: comp. 517 *inane rerum* which most editors causelessly alter: *natura inanis* therefore is like *natura animi, aquae* etc. **367** *Dedicat* used by Lucr. three times and always in this sense: comp. *indicare*: it is synon. with *declarat* in 365: *Accius* 78 *te esse Alcmaeonis fratrem factis dedicat*. With these vv. comp. what Theophr. *περὶ αἰσθησ.* 61 says of Democritus, *βαρὺ μὲν οὖν καὶ κοῦφον τῷ μεγέθει διαιρεῖ Δημόκριτος* in his *ἄμικτα* or atoms. *οὐ μὴν ἀλλ' ἔν γε τοῖς μικτοῖς κουφότερον ἂν εἶναι τὸ πλέον ἔχον κενόν, βαρύτερον δὲ τὸ ἔλαττον*, and comp. the de caelo IV 2. **368** *Est* emphatic, 'exists'.

370—397: some falsely maintain that motion may take place thus: a fish for example advances, because the water it displaces goes into the space which it leaves. But without void how can water begin to give

place, that the fish may begin to advance? Again two bodies in contact start asunder: there must be void between the two at all events until the air has filled this space: if you say the air condenses when the bodies are together, I assert that air cannot so condense; and if it could, it could not thus contract without void. **370** it is not easy to say whether *illud* is nom. to *possit* or accus. after *praecurrere*: whichever it be, the other is understood. *praecurrere*: the metaph. is obvious: to run before a thing, and so meet it by anticipation. **372** *squamigeris*: 378 *squamigeri* i.e. pisces: prob. also 162 *Squamigerum*: see n. there; and comp. the graphic *pennipotentum* for birds; and 887 *lanigerae*=oves. **377** *falsa totum*=prorsus falsa, as N. P. Howard observes: so III 686 *totum contra*; IV 1088 *contra totum*. This adverbial use of *totus* is very common in idiomatic Latin, as in Cicero's letters to Atticus: of very many instances which I have collected take the following: IX 2 A, 1 *repudiari se totum...putabit*; IX 10 3 *alia res nunc tota est*; X 12 1 *Reginus erat totus noster*; XIII 21 3 *est enim verbum totum nauticum*; XV 1 2 *totum me futurum suum*; XVI 5 2 *sic enim commutatus est totus*; [Cic. epist. III 9 at end *meque totum et mea et meos commendatos habebis*; V 20 2 *totum enim scribam meum tibi tradidi*; VII 33 2 *me totum in litteras abdere*; VIII 4 2 *totus* (Caelius); VIII 8 10 *se totum* (Caelius); IX 16 8 *quam totam sustuli*; XI 29 2 *totum te contulisti*; XVI 12 6 *ut totum te susciperet*; ad Q. fr. II 10 (12) 3 *totum me amplexatur*, 4 *totum sibi aqua madidum redditum esse*; Sueton. Caes. 46 *villam... quia non tota ad animum ei responderat, totam diruisse*; Sen. rhet. suas. II 17 *totus Xerses meus erit*; controv. I 7 16 *latro totum se ab istis removit coloribus*.] *omnis* is used in the same way: see n. to II 53: and *nullus* 'not at all': Catul. 8 14 *cum rogaberis nulla*: [Livy XXIV 36 8 *postquam ea nulla contigerat*; comp. VIII 35 4 *quae in discrimine fuerunt, an ulla post hanc diem essent*:] Cic. ad Att. XI 17 1 *consilium quod capi nullum potest*; 24 4 *Philotimus...nullus venit*; XV 22 *ab armisque nullus discederet*: so Lucr. himself I 427 *Si nullum foret*: and often in Plautus and Terence. **383** *init. movendi*: *initum motus* occurs II 269 III 271: this use of *initus* for *initium* seems peculiar to Lucr. **384** *de* is explained 'after': perhaps it expresses 'at once from a state of': Faber quotes Plaut. most. 697 *Non bonust somnus de prandio* and Aen. II 662 *Iamque aderit multo Priami de sanguine Pyrrhus*: comp. also the phrase *diem de die differre*, and Cic. ad Att. XII 3 1 *velim scire hodiene statim de auctione, et (aut) quo die venias*: somewhat like is VI 290 *Quo de concussu*. **385** *cita*=cito: Plaut. Amph. 1115 *Citus e cunis exilit*, 1127 *pergunt ad cunas citi*: for other instances see Freund lex. s. v. 2. **386** *possidat*: is this a *ἅπαξ λεγόμενον*? lexicons give no other genuine instance of its use. **389** *prim. quem.* i.e. each part successively one after the other: comp. Cic. de invent. I 33 *ut et prima quaeque pars, ut exposita est in partitione, sic ordine transi-*

gatur et omnibus explicatis peroratum sit...et ad primam quamque partem primum accessit et omnibus absolutis finem dicendi fecit; auctor ad Heren. III 37 *ut identidem primos quosque locos imaginum renovandarum causa animo pervagemus*; Livy XLII 32 7 *cum tribuni militum, qui centuriones essent, primum quemque citarent*: and so V 291 *primum iactum fulgoris quemque perire*: also 264 *primum quicquid aquai*, 284 *primum quicquid fulgoris*, 304 *primum quicquid flammarum*, Lucretius loving the archaism *quicquid* for *quicque*, as has been said above. **392** *id fieri*, i.e. that what has been described takes place, because the air is able to condense itself, and so also to expand where necessary: the subj. shewing it was the erroneous judgment of the thinker, as *quia linquant* in 383: Creech argues that some vss. are lost here; but I cannot gather from his note that he had any clear conception of how he meant the lacuna to be filled up. Lucr. is curt and elliptical because he would not I think have found it easy to state fully what seemed to him an absurdity. The power of the air in 392 to condense implied thereby the power of expanding; and 395 seems to me distinctly to prove that 392 contains the gist of the argument: they assert that the air condenses, but it cannot condense without vacuum: a vacuum is formed where it did not exist before, i.e. between the two bodies which have separated: a vacuum is filled which existed before, i.e. somewhere on the outer sides of the two bodies. **392** *condenseat* and **395** *denserier*: Lucr. appears only to know the 2nd conjug.: see notes 1 to V 491. **396** *si iam posset*: see n. to 968. **397** *trahere* neut. as VI 1190 *nervi trahere*: see n. to VI 595: perhaps in our passage Lucr. means to imply the contraction would have taken place without apparent cause. *part. cond. in un.* repeated III 534 *ipsam se posse per artus Introsum trahere et partis conducere in unum*: I 650 *conductis partibus*: which seems to prove that *trahere* here=*se trahere*.

398—417: much more might I say; but a keen intellect can now by itself pursue the question farther: if however you demur, I have such store of arguments in reserve, that our life will come to an end sooner than they. **398** Virg. ecl. IX 56 *Causando nostros in longum ducis amores*. **400** *possum*: Virg. geor. I 176 *Possum multa tibi veterum praecepta referre*; Cic. pro Caelio 53 *possum dicere...possum etiam illa... perquirere...possum omnes latebras suspicionum peragrare dicendo.. sed haec...*; pro Sestio 7 *possum multa dicere de.. sed...*; in Verr. (II) I 125 *possum sexcenta decreta perferre...verum...*: the usage is very common, analogous with that of *poteram*, *potui*, etc. in conditional sentences. **401** *conradere* is twice used in VI in its literal sense. **402** *sagaci*: see n. to 50: the metaph. is kept up in *vestigia*; and the expressions naturally lead to the simile: comp. *sagax nasum* of Plautus, *nare sagaci* of Ennius. **404** *montivagae* agrees with *ferai*, as shewn by II 597 and 1081: Soph. Phil. 943 *θῆρ' ὀρειβάτην*. **405** *quietes*: I find no other instance of the word in this sense; but Cic. de off. I 103 and Sall. Cat. 15 use it in the plur. **406** *instit. vestigia*: so Virgil *insiste viam*, *insistere limen*, [and Aen. XI 573 *vestigia plantis Institerat*;] and Plaut. capt. 794 *omnes itinera insistant sua*: the constr. is common enough; for the quantity of *instit.* comp. IV 975 *destiterunt*, V 415 *Constiterunt*: he uses also *desierunt*, *exierunt*, *transtulerunt*, *dididerunt*, *excierunt*, *occiderunt*, *deciderunt*, *inciderunt*, *prodiderunt*; VI 4 *dedĕrunt*, V 474 and elsewhere *fuĕrunt* which, like Virgil's *tulĕrunt*, shew that the quantity does not arise from the mere necessity of the metre; and moreover this shortening is not unknown to Plautus and Terence: see Wagner, Ter. eun. 20. As we find *potuĕrunt* twice in Laberius; *sumpsĕrunt* in a popular v. ap. Suet. Caes. 80; and as *ĕ* is common in Phaedrus, it must always have been a familiar pronunciation. **408** *latebras*, Cic. pro Caelio 53 *omnes latebras suspicionum*. **409** *insinuare*: for syntax see n. to 116: V 73 the constr. is the same. **410** *pigraris*: this rare verb occurs twice in the fragments of Accius. **411** *de plano*, *e plano*, *ex aequo loco* are opposed to *pro tribunali* or *ex loco superiore*: Cicero several times uses *ex aequo loco* in this sense; and comp. Sueton. III 33 *iudicesque aut e plano aut e quaesitoris tribunali..admonebat*: Brissonius de verb. signif. s. v. *planus* cites Paull. recep. sent. V 16 14 *custodiae non solum pro tribunali sed et de plano audiri possunt*: it implies therefore an off-hand decision given anywhere in a simple case, in contradistinction to a more formal and deliberate judgment from the bench. Lucr. means to say that he needs no time for consideration; so sure is he of his case. corp. inscr. I 198, 65 and 66, we have twice *ubei de plano recte legi possitur*; ib. 206, 16 *propositum habeto u d p r l p*; Orell. inscr. 775 *proponi in publico unde de plano recte legi posset*; Plin. paneg. 71 *devexus quidem in planum et quasi unus ex gratulantibus*. **412 413**: comp. Prop. V (IV) 1 59 *exiguo quodcunque e pectore rivi Fluxerit*. *haustus e font.*: Hor. epist. I 3 10 perhaps refers to Lucr.: *Pindarici fontis qui non expalluit haustus*. *e font. de pect.* in one sentence: IV 694 *Ex alto quia vix emittitur ex re*; VI 1012 *ex elementis..e ferro* and n. there; II 447 *In quo iam genere in primis*; IV 97; VI 721: [so *deductis...in locupletissimas urbes in hiberna legionibus*.] **413** *meo diti de pect.*: this use of the poss. pron. with an adj. seems an imitation of Ennius' antique manner, also imitated by Virgil, as *tuo cum flumine sancto* for instance: see n. to IV 394 *suo corpore claro*. Comp. Hor. epist. II 2 120 *Vemens et liquidus puroque simillimus amni Fundet opes Latiumque beabit divite lingua*; Hor. applying *dives* to the *lingua*, which is supplied by the *pectus*; the heart being the seat of the intellect according to Lucr. and most ancient philosophers: 731 *Carmina quin etiam divini pectoris eius*; V 1 *pollenti pectore carmen Condere*: comp. too Cic. de consul. suo 74 *Fuderunt claras fecundi pectoris artis*; Ov. trist. III 7 (8) 43 *nil non mortale tenemus Pectoris exceptis ingeniique bonis*; V 12 2 *Ne pereant turpi pectora nostra situ*=21 *ingenium longa rubigine laesum Torpet*.

diti: on the other hand V 1115 *Divitioris*: he nowhere else uses either form. **414** *tarda* surely agrees with *senectus*: see n. to V 1414. **415** *vit. cl.*: this metaph. he twice repeats, III 396 *magis est animus vitai claustra coercens*; VI 1153 *vitai claustra lababant*: comp. too Cicero's words *cum ego claustra nobilitatis refregissem*. The words imply those bars and defences which have to be forced and broken open before body and soul can be severed and life destroyed.

418—448: all nature then consists of body, and void in which body moves: deny the existence of body, you take away the foundation on which rests all reasoning about abstruse things: without void no motion is possible as I have just shewn. There is no third nature distinct from these two: if a thing can touch or be touched, it is of the class of body; if it cannot, of void: neither sense nor reason can grasp any third class. **418** *repet. pertexere*: VI 936 *repetam commemorare*, the same constr.: in both cases the inf. is for the accus. He uses the inf. for a subst. in the nomin. often: see n. to 331: sometimes for the accus. as IV 245 *internoscere curat*; V 1186 *perfugium sibi habebant omnia divis Tradere*; VI 68 *remittis Dis indigna putare*; 1227 *quod ali dederat vitalis aeris auras Volvere in ore licere et caeli templa tueri*, where a second infin. depends on the first used as an accus. subst.: *repet.* then has precisely the force it has Ovid met. III 151 *Propositum repetamus opus*, and ars III 747 *Sed repetamus opus*: the metaph. in *pertexere* is obvious: VI 42 *inceptum pergam pertexere dictis*. **419** For this *igitur* see Ussing to Plaut. Amph. 207. It is more than once put by Lucr. in the apodosis and has misled editors: IV 199—204 *si, quae...Quid quae sunt igitur*; 862—865 *quae quia sunt...His igitur rebus rarescit*: in both which passages Lach. has gone wrong; as the older editors have in the present one: comp. also IV 513—520 *Denique ut...Sic igitur ratio*; and V 260 *Ergo*. Sometimes too Lucr. places *igitur* late in the sentence; II 678, where the partic.=a protasis, it is the 7th: VI 1246 *ergo* comes 5th, II 569 *itaque* 5th in the sentence, IV 705 4th: VI 1277 *enim* is the 9th word; I 219 and VI 701 the 5th in the sentence; it often comes fourth and third: not unlike is his carelessness with *que* and *quoque*; see n. to II 1050. *per se* manifestly belongs to *ut est*, not to *constitit* with which Lach. joins it: *ut est* has no force alone, and the assertion would contradict Epicurus: comp. Cic. de nat. deor. II 82 *sunt autem qui omnia naturae nomine appellant, ut Epicurus qui ita dividit, omnium quae sint naturam esse corpora et inane quaeque his accidant*; in precise conformity with which Lucr. says 445 *tertia per se Nulla potest* cet.: see too 422 440 and 459 *Tempus item per se non est* and 466 and 479: from all which is is clear Lucr. does not deny that 'accidents' are, but denies that they exist by themselves, *per se*. See too Epicurus' own words in Diog. Laert. X 68 οὔθ' ὡς καθ' ἑαυτάς εἰσι φύσεις [τὰ σχήματα κ.τ.λ.] δοξαστέον, and those cited at 445, which Lucr. almost translates.

419 *duabus In rebus*: 449 *duabus Rebus*: 503 *duarum rerum*: Lucr. seems to depart here from his ordinary use of the word *res* which occurs many hundred times in his poem. Elsewhere it has one of its numerous abstract meanings; or denotes things in being opposed to the first-beginnings out of which things in being are formed. But here too it has almost an abstract meaning, and denotes the general conception of body and void; which he expresses sometimes by *natura*. **420** *Constitit*= ἕστηκε, *stat*, or *constat*, as often in Latin: III 177 *animus quali sit corpore et unde Constiterit*; Seneca suasor. 1 2 *ultra Liberi patris tropaea constitimus*; 9 *illa demum est magna felicitas quae arbitrio suo constitit*; Aen. III 679 *quales cum vertice celso Aeriae quercus aut coniferae cyparissi Constiterunt*; Ov. ars II 478 *Constiterant* (=stabant) *uno femina virque loco*; [Caes. bell. G. VII 3 1 and 42 5 *qui negotiandi causa ibi constiterant*; 49 3 *ubi constiterat, eventum pugnae expectabat*;] Hor. od. I 9 *Vides ut alta stet nive candidum Soracte...geluque Flumina constiterint acuto*; Sen. Herc. Oet. 678 *Patrioque puer constitit axe*; Cic. ad fam. VII 17 1 *iam videris certa aliqua in sententia constitisse*; ad Att. VIII 11 1 *levatur enim omnis cura, cum aut constitit consilium aut cogitando nihil explicatur*: it is worth noting that Nonius p. 256 quotes Cic. de fin. V 86 thus 'omnis auctoritas philosophiae *constitit* in beata vita comparanda': Cicero's mss. *consistit*; and the two words are synon. Often as he uses the words, Lucr. never has *in* after *consisto* or *consto*, except in this place: but lexicons give many instances of *in* after *consisto*; and Caes. bel. civ. III 89 3 and Nepos Attic. 14 3 have *constare in*. See Draeger hist. synt. I p. 515 § 237. *corpora* has here its most extended sense: comp. 483: it includes all *corpus*, whether *corpora prima* or *res*: so Epic. himself in Plut. adv. Colot. 13 τὴν τῶν ὄντων φύσιν σώματα εἶναι καὶ κενόν. **422** *comm. sensus*: comp. Epic. in Diog. Laert. X 39 τὰ σώματα ὡς ἔστιν αὐτὴ ἡ αἴσθησις ἐπὶ πάντων μαρτυρεῖ, καθ' ἣν ἀναγκαῖον τὸ ἄδηλον τῷ λογισμῷ τεκμαίρεσθαι: *communis sensus* here has much the same force as *naturalis sensus* the sense given by nature to all sane men: Arist. met. I 1 p. 981 b 13 εἰκὸς τὸν ὁποιανοῦν εὑρόντα τέχνην παρὰ τὰς κοινὰς αἰσθήσεις θαυμάζεσθαι ὑπὸ τῶν ἀνθρώπων. Cicero is fond of using it with the same meaning, whether in the sing. as Lucr. and Epicurus l. l.: pro Planc. 31 'valeret, inquam, communi sensu omnium et dulcissima commendatione naturae'; de orat. II 68 'in sensu hominum communi, in natura, in moribus': or in the plur. as Aristotle l. l.: thus pro Cluent. 17 'hoc quod in communibus hominum sensibus atque in ipsa natura positum atque infixum est'; de orat. III 195 'quod ea sunt in communibus infixa sensibus nec earum rerum quemquam funditus natura esse voluit expertem'; passages shewing how nearly Cicero connected it with nature. But de orat. I 12 'a vulgari genere orationis atque a consuetudine communis sensus abhorrere'; pro Planc. 34 'communis ille sensus in aliis

fortasse latuit cet.', and in Horace Seneca Quintilian and Juvenal the expression rather denotes 'an acquired perception or feeling of the common duties and proprieties expected from each member of society etc.' quoted from Sir W. Hamilton by Mayor to Juv. VIII 73; though the two senses sometimes run into one another. **423** *cui*, as N. P. Howard says, depends on *fides*=cui fides adhibita: Livy III 10 6 *cui rei priore anno fides non fuerat*; Aen. III 69 *ubi prima fides pelago*; Aetna 516 *figulos huic esse fidem*; Ov. her. 17 (18) 119 *Siqua fides vero est*; am. II 2 38 *In verum falso crimine deme fidem*. **426** foll.: Lucr. again closely follows Epic. l. l. 40 εἰ μὴ ἦν ὃ κενὸν καὶ χώραν καὶ ἀναφῆ φύσιν ὀνομάζομεν, οὐκ ἂν εἶχε τὰ σώματα ὅπου ἦν οὐδὲ δι' οὗ ἐκινεῖτο, καθάπερ φαίνεται κινούμενα. **427** *si nullum foret*: see n. to 377. **429** *supera*: 370 foll.: which shew Lamb. and others to be wrong in reading *quaquam* in 428: 421 we have *qua diversa moventur*; but *moveri* and *meare* are not the same; and Lucr. manifestly refers to 378 *Nam* quo *squamigeri poterunt procedere tandem, Ni spatium dederint latices? concedere porro Quo poterunt undae*, cet.: *meare*=procedere et concedere.

430—482: doubtless he dwells at such length and with such emphasis on this argument, because the stoics taught that all states qualities virtues etc. were body: take among many passages what Chrysippus says in Plut. de repugn. stoic. 43 p. 1053 F οὐδὲν ἄλλο τὰς ἕξεις πλὴν ἀέρας εἶναι, φησίν· ὑπὸ τούτων γὰρ συνέχεται τὰ σώματα· καὶ τοῦ ποιὸν ἕκαστον εἶναι τῶν ἕξει συνεχομένων αὐτὸς ὁ συνέχων ἀήρ ἐστιν, ὃν σκληρότητα μὲν ἐν σιδήρῳ κ.τ.λ. and Sen. epist. 117 7 *quod accidit alicui, utrum extra id cui accidit est, an in eo cui accidit? si in eo est cui accidit, tam corpus est quam illud cui accidit. nihil enim accidere sine tactu potest: quod tangit, corpus est. si extra est, posteaquam acciderat, recessit. quod recessit, motum habet. quod motum habet, corpus est.* **432** *Quod*: see n. to III 94 *animum, mentem quam.* *tert. numero*: this redundant use of *numero* is sufficiently illustrated by Forc. s.v. **435** *Augmine*, a word often used by Lucr. and only by him and his constant imitator Arnobius: so VI 614 *adaugmen*: *momen* too seems peculiar to him and his imitators, for *momentum*; he also uses *fragmina* more than once: *glomeramen frustramen vexamen clinamen* too he alone of classical writers employs. *dum sit* i.e. dummodo sit. **436** *Corp. num.*: the lexicons cite from Cicero and Caesar *numerus vini, frumenti, olei* and the like; Livy also has *magnum frumenti numerum*; *signati argenti magnum numerum*; Cic. pro Cluent. 87 joins *numerus* and *summa*, as here: *cum ipsa pecunia... numero ac summa sua...ostendat.* *sequetur*: will go to make up the sum, *explere summam.* **437** *intactile*, another ἅπαξ λεγ. by which he translates the ἀναφής of Epicurus. **438** *meantem*, a favourite word of Lucr. in its proper sense of passing to and fro. **439** *vac. in.* a striking pleonasm often repeated; just below he has *inane vacansque*: 523 we find even *spatium vacuum inane.* **440** *faciet quid* used of

course in the technical sense of the Greek ποιήσει τι: *fungi* peculiar to Lucr. both in the technical sense as here and 443, and in the common sense, as III 168 734 V 358, of πάσχειν. **441** *ipsum* on its part in contrast to *aliis agentibus.* **442** *erit, ut possunt* of mss. I now think is right: see n. to II 901 *ut debent.* [Comp. also II 112 *Cuius, uti memoro, rei*, and Plaut. Amph. cited there; also asin. 28 *ut ipse scibo te faciam ut scias* (=talia qualia ipse scibo); Ter. Phor. 224 *Meministin, olim ut fuerit vestra oratio* (=qualis fuerit); Juv. XIII 46 *nec turba deorum Talis ut est hodie*; and perhaps Cic. pro Sex. Rosc. 33 *aiunt hominem, ut erat furiosus, respondisse*, i.e. quo erat furore: see Madv. gramm. 444 a anm. 4.] **443** Epic. in Diog. Laert. X 67 τὸ κενὸν οὔτε ποιῆσαι οὔτε παθεῖν δύναται, ἀλλὰ κίνησιν μόνον δι' ἑαυτοῦ τοῖς σώμασι παρέχεται. **445—450** comp. Epic. ibid. 40 παρὰ δὲ ταῦτα οὐθὲν ἐπινοηθῆναι δύναται οὔτε περιληπτῶς οὔτε ἀναλόγως τοῖς περιληπτοῖς, ὡς τὰ καθ' ὅλας φύσεις λαμβανόμενα καὶ μὴ ὡς τὰ τούτων συμπτώματα ἢ συμβεβηκότα λεγόμενα: the τὰ κ. ὅλ. φύσ. λαμ.= *omnis ut est per se natura* of 419; φύσεις being applied to body and void alike by the school of Democritus and Epicurus. **447 448** might be all expressed by οὔτ' αἰσθητὸν οὔτε νοητόν. **448** *apisci*: so IV 1235 *apisci contagia*, and V 808 *terram radicibus apti.*

494—482: all other things are either inseparable properties or accidents of matter or void: time also exists not by itself: from the things that go on follows the feeling of past present and future: the actions done at the siege of Troy for instance did not exist by themselves, but were mere accidents of the men there or the places there: without body and space nothing which there happened could have happened. **449** *cluent* is almost the same as *sunt*, as often in Lucr.: 'all things which have a name, which exist'. *coniuncta* and *eventa* appear to have been devised by Lucr. himself to distinguish the two kinds of συμβεβηκότα or *accidentia*, the καθ' αὑτά or *per se*, and those not so: the editors after Lamb. quote a passage of Porphyry and decide that *coniuncta*=συμβεβηκότα, *eventa*=συμπτώματα. The truth is that in the passage quoted above from Epicurus, as well as in 67, 68, 70, 71 of the same letter, συμβεβ. and συμπτ. are synonymes, denoting either kind of accident; just as Aristotle uses perpetually συμβεβηκός both for his καθ' αὑτὸ συμβ. and for the μὴ καθ' αὑτό: see last chap. of metaph. V; and Cicero in the passage quoted at 419 uses *quaeque his accidant* for both kinds. I might cite many passages from Sextus of the quite indifferent use of the two terms: adv. math. X 221 which bears directly on what follows, τούτων τῶν συμβεβηκότων τὰ μέν ἐστιν ἀχώριστα τῶν οἷς συμβέβηκεν, τὰ δὲ χωρίζεσθαι τούτων πέφυκεν. ἀχώριστα μὲν οὖν ἐστὶ τῶν οἷς συμβέβηκεν ὥσπερ ἡ ἀντιτυπία μὲν τοῦ σώματος, εἶξις δὲ τοῦ κενοῦ....(454 might have been forged from this clause)...οὐκ ἀχώριστα δέ ἐστι τῶν οἷς συμβέβηκεν καθάπερ ἡ κίνησις καὶ ἡ μονή: now comp. with this Diog. Laert. 67: Epicurus argues

the soul is not immaterial, because then it could not *ποιεῖν οὔτε πάσχειν*: *νῦν δ' ἐναργῶς ἀμφότερα ταῦτα διαλαμβάνομεν περὶ τὴν ψυχὴν τὰ συμπτώματα.* Are *συμπτώματα* here *coniuncta* or are they not? I ask; and yet the latest authorities such as Zeller and Ussing continue to distinguish the two terms. Galen also again and again uses them as synonymes; as Method. Med. I 8 *ἕτερόν τι γένος εἴτε συμπτωμάτων εἴτε συμβεβηκότων εἴθ' ὅπως ἂν ἄλλως ἐθέλῃ τις ὀνομάζειν.* [**450** *ea*: for this position in the sentence see Ussing to Plaut. Amph. 181.] **451** *permitiali*: *permities permitialis permitiabilis* are quite distinct in origin, and differ perhaps in meaning from *pernicies perniciosus*: whether *pernicialis* or *perniciabilis* exists I cannot say; but Conington, Virgil vol. 3 p. 223, is mistaken in supposing that I did not believe in the existence of *pernicies, perniciosus*. There is overwhelming evidence however for *permities*, etc.: they are found in the best mss. of Plautus, Livy, Tacitus; in the palimpsest and two other of the best of Pliny xv 74: Nonius, p. 153 and 218, assigns a *permities* to Plautus, Accius and Lucilius: in Sen. Agam. 229 the *permitti* of the Florentine attests *permitiem*: again Donatus ars gramm. II, p. 392 Keil, says 'per inmutationem litterae ut *olli* pro *illi*, syllabae ut *permities* pro *pernicies*', attesting both the *m* and *t*, as otherwise it would not be *syllabae* but *litterae*. *permities* seems to imply 'utter destruction', 'annihilation': *pernicies* and *perniciosus* are prob. connected with *noceo*: see Corssen II p. 422: we say *perniciosae leges*; and in our passage 'sine pernicioso Discidio' would ill express Lucretius' meaning. See Fick vergl. Woerterb. I p. 153, 3 *mi* etc. who compares with various Sanscrit words *μινύω μινύθω μείων*; *minus minuo* etc., and Corssen krit. Beitr. p. 266 foll.: *permities* therefore will signify 'a wasting away to nothing': Fick. l. l. p. 470 'with the form *-tyâ* comp. sanscr. *i-tyâ* 'going', lat. *ex-itium, in-itium* etc.' **452** *seque gregari*: 651 *disque supatis*: so *inque merentes, inque peditur, inque pediti* etc. *inque tueri, inque gravescunt, inque gredi*; *conque globata, conque gregantur, conque putrescunt*; *perque forare, perque volare, perque plicatis*; *proque voluta, praeterque meantum, praeter creditur ire, rareque facit, inter enim iectast, inter enim fugit, inter quasi rupta, inter enim saepit, inter quasi rumpere, inter enim cursat, inter plaga currere*; *circum tribus actis*; *esse sui quiddam super*; even *inter quaecumque pretantur*, and *facit are*; though he does not rival Ennius' *cere comminuit brum.* **455—456** these nominatives, which are out of the construction and=vocabula quae sunt 'servitium etc.' are curious: comp. Catull. 86 3 *Totum illud 'formosa' nego*; [Hor. od. III 24 27 *Si quaeret* 'pater urbium' *Subscribi statuis*; Prop. I 18 31 *resonent mihi* 'Cynthia' *silvae*; Sen. Herc. fur. 643 (647) *poenas dabit*: *Lentum est* 'dabit': *dat*;] and perhaps Cic. de fin. II 107 *haec leviora ponam*: *poema,...signum, tabula, locus amoenus, ludi, venatio, villa.*

459 foll.: here too Lucr. is combating Chrysippus and the porch who

taught that time was not only *ἀσώματον*, but also like void *καθ' αὑτό τι νοούμενον πρᾶγμα*: see Sextus l. l. 218. With these vss. should be comp. Epic. in Diog. Laert. x 72, or the fuller passage of Sextus l. l. 219 *'Επίκουρος δὲ...τὸν χρόνον σύμπτωμα συμπτωμάτων εἶναι λέγει παρεπόμενον ἡμέραις τε καὶ νυξὶ καὶ ὥραις καὶ πάθεσι καὶ ἀπαθείαις καὶ κινήσεσι καὶ μοναῖς. πάντα γὰρ ταῦτα συμπτώματά ἐστι τισὶ συμβεβηκότα.* Time therefore is an accident of accidents: Lucr. treats the question with reference to the accidents of body and void last mentioned by Sextus, viz. states of motion and states of rest. Lucr. may well have been thinking of the strange words of Chrysippus in the first book of his *φυσικὰ ζητήματα*, quoted by Plutarch de comm. not. p. 1084 D, *οὐχ ἡ μὲν νὺξ σῶμά ἐστιν, ἡ δ' ἑσπέρα καὶ ὁ ὄρθρος καὶ τὸ μέσον τῆς νυκτὸς σώματα οὐκ ἔστιν· οὐδὲ ἡ μὲν ἡμέρα σῶμά ἐστιν, οὐχὶ δὲ καὶ ἡ νουμηνία σῶμα, καὶ ἡ δεκάτη καὶ πεντεκαιδεκάτη καὶ ἡ τριακάς, καὶ ὁ μὴν σῶμά ἐστι, καὶ τὸ θέρος καὶ τὸ φθινόπωρον καὶ ὁ ἐνιαυτός.* **461** *porro* is the connecting particle, *deinde* belongs to *sequatur*, as a connecting particle is wanted: otherwise Plautus joins *deinde porro* and *inde porro.* **464** and **471** *Denique*: see n. to 17. **465 466** *dicunt* and *cogant* plainly refer to Chrysippus and the stoics who, as we saw, taught that accidents were bodily entities, time an immaterial entity: they doubtless therefore used the hymonymes *esse*, *esse* to prove that as for instance the rape of Helen was, therefore the rape exists of itself, and the like: comp. the plurals in 655, 657, 658, 659, 660, 665, 667; 782, 783; 1053, 1062, 1083, 1087; all of them aimed at the stoics. [On *esse* see Mill Logic p. 86 125 etc. (3rd edition), and Hobbes etc. cited by Bisset Essays p. 87 foll.] **466** *haec* the rape of Helen and the conquest of Troy. **469** as usual, to make his argument more vivid, he has taken a special case intelligible to all, the conquest of Troy. This illustration he continues: *Teucris* therefore takes the place of the generic *Corporis* of 482, *regionibus* of *loci*: notice too the *quodcumque erit actum* of a special past event, not *agetur*: he singles out *Teucris* here, because he had singled out *Troiiugenas gentis* in 465: the Greeks in both cases would have answered his purpose, had he so chosen. **471** he seems here to pass from time, the accident of accidents, to the more general question of 449, that of accidents generally. **473** *conflatus* keeping up the metaphor of a fire blown into flame. **474** *Alex. Phrygio sub pec.*: II 501 *Thessalico concharum tacta colore*; v 24 *Nemeaeus magnus hiatus Ille leonis*: comp. Virgil's *Tyrrhenusque tubae clangor*; *arma dei Volcania*; Valgius' *Pylio profluxerit ore Nestoris*; Catullus' *iniusti regis Gortynia tecta*; Horace's *pinguis Phrygiae Mygdonias opes* [and *Tyrrhena regum progenies*; Propertius' *eques Etrusco de sanguine regum*]; Homer's *Γοργείην κεφαλὴν δεινοῖο πελώρου* and *Νεστορέῃ παρὰ νηὶ Πυλοιγενέος βασιλῆος*: perhaps too 119 *gentis Italas hominum*; but see n. there. *gliscens* still keeping the same metaphor. **475** *Clara* seems

a play on the two meanings of famous in story, and bright in reference to the flames of war: comp. 639 *Clarus ob obscuram linguam.* **476** *durateus*, the ἵππου κόσμος Δουρατέου τὸν Ἐπειὸς ἐποίησεν σὺν Ἀθήνῃ, made more famous by the 'timber' horse of bronze in the acropolis, out of which peeped Menestheus Teucer and the sons of Theseus, whence Virg. Aen. II 262 probably got his Acamas. *Troiianis* is of course governed by *clam*: Lamb. Creech Wak. and others have strangely blundered here. ['Caes. b. c. II 32 8 *nonne sibi clam vobis salutem fuga petivit?*: weiter kenne ich keine Beweisstelle fuer *clam* mit dem Ablat.' Draeger hist. synt. I p. 621: but see also Fronto ad amic. 1 15 *quod clam ceteris esse velim*; auct. bell. Afr. II 4 *clam hostibus*; these four instances seem indisputable. In Plautus Ritschl and Fleckeisen seem to wish to expel the abl., perhaps rightly if Ritschl is correct with regard to A. But in merc. 809 (798 Uss.) all mss. have *viro si clam*: *virum* is a conj. *Palam* governing only abl., I had thought this construction with *clam* more common than it is, and that the acc. was an archaism.] *partu*: Aesch. Agam. 791 Ἀργεῖον δάκος Ἵππου νεοσσός: Eurip. Troad. 11 Ἐγκύμον' ἵππον τευχέων: perhaps Lucr. was thinking of Ennius' *gravidus armatis equus Suo qui partu perdat Pergama ardua*: Virgil's *uterumque armato milite complent* is the same metaphor. **477** *equos* our mss. this once: *ecus* or *ecum* three times: *equus* once, which Lucr. would scarcely have written, but well *equs*. **479** *constare* and *esse* are here perfectly synon. **480** *cluere* = esse. **481** *Sed magis* [ita esse et ita cluere] *ut*. **482** see n. to 469.

483—502: the first-beginnings are perfectly solid and indestructible: sense suggests no notion of this solidity: reason can alone prove it. **483 484** translated from Epic. in Diog. Laert. X 40 τῶν σωμάτων τὰ μέν ἐστι συγκρίσεις, τὰ δ' ἐξ ὧν αἱ συγκρίσεις πεποίηνται. **483** *corpora* in its most general sense, as 420 *nam corpora sunt et inane*: and as already observed he always uses the term quite indifferently for either *corpora prima* or *res*. **484** *concilio constant*: see n. to 221. **485** *Sed* means, though other *corpora* may, these may not. **486** *Stinguere* seems peculiar to Lucr. who uses it several times, and his frequent model Cicero in his Aratea: it appears synon. with *extinguere* and is used elsewhere by Lucr. for quenching fire or thirst: the more common *extinguere* is used in the same way for any kind of destruction. *demum*: however long the contest, they in the end prevail: ἄτομα καὶ ἀμετάβλητα, says Epicurus himself l. l.: 'the mass of the molecule, and the other constants which define its properties, are absolutely invariable; the individual molecule can neither grow nor decay, but remains unchanged amid all the changes of the bodies of which it may form a constituent' Prof. Maxwell, Introductory lecture p. 21. **489**: VI 228 *Transit enim validum fulmen per saepta domorum, Clamor ut ac voces: caeli fulmine* occurs V 1244. **491** *fero*: this epithet is applied by Ovid to *ignis* more than once. **492** *labef.* implies

the breaking up of the whole inner structure of a thing by some greater force, esp. heat as here: IV 697 *igni conlabefacta*; Aen. VIII 390 *Intravit calor et labefacta per ossa cucurrit.* *rigor*: Virg. geor. I 143 *Tum ferri rigor*; Manil. II 780 *ferrique rigor*; Prudent. perist. X 702 *aeris aut ferri rigor.* **493** *glacies*, a bold but expressive metaphor to which I know no exact parallel; but Mart. I 49 12 says *Salone, qui ferrum gelat.* **494** *penetrale*: Virg. geor. I 93 [and Mart. IV 19 9] *penetrabile frigus.* **496** *lymph. rore*: 771 *roremque liquoris*; 777 *cum rore*; IV 438 *rorem salis.* **499** *ades*: *adesse animo* and *animis* are common in Cicero: but as here, Ov. ex Ponto III 3 2 *ades, Dum tibi quae vidi refero*; Plaut. Men. 643 *audi atque ades*; merc. 568 *ausculta atque ades*; Sen. Hipp. 1175 *Ades parumper.*

503—550: where void is, body is not: these first bodies therefore are solid and without void: things in being all contain pure void enclosed by pure body: these first bodies then may continue, when the things are broken up: and void we have shewn must exist; it alternates then with body: these first bodies cannot be crushed split or broken up from within; they are therefore eternal: without this eternal matter all things would have come from nothing, and would have been reduced to nothing: first-beginnings therefore are of solid singleness. **506** *sibi* appears to be added merely to increase the force of *per se* and *puram* as in English we say 'in and for itself', 'for and by itself': III 145 *Idque sibi solum per se sapit*; 684 *per se sibi vivere solam*: *per se* is often used by Lucr. with this force: we have already had it eight times. This being a cardinal point in Epicurus' philosophy, the absolute distinctness of the atoms and void which alternate in everything in being, he puts the statement of this doctrine in a variety of shapes. The necessary result is the absolute hardness and impenetrability of his first-beginnings; and it is the absence of this perfect fulness and solidity in the elements of rival philosophers that he again and again most strongly inveighs against. **507—509** *quacumque, ea*: Livy XXIV 2 10 *quacumque, ea*; and *qua, ea* again and again. **508** *tenet se* = locum tenet, and *tenet* neut.: in Livy *intra Appeninum, loco, finibus, castris, muris, moenibus se tenere* and the like are very common. **511** *genitis in rebus*, to express more distinctly what *in rebus* alone expresses. **515** *solidum* in its technical sense of perfect impenetrability: see n. to 1018 *magnum*, and IV 63 *tenuis.* *relinquas*: this verb in the sense of conceding occurs not unfrequently in Lucr. as soon after, 658 and 743: for the infin. see n. to III 40. **517** as *inane* is so oft. a subst. in Lucr., surely *in. rer.* for 'the void of things in being' is not harsher than 363 *natura inanis* (gen.) and 365 *plus esse...inanis.* **520** *vocaret*: with the old writers *voco, vocuus, vocatio* etc. were the common, if not the only forms in use for *vaco*, etc.: Fleckeisen, Bergk, Buecheler Rhen. mus. n. f. XIII p. 583, Mommsen corp. inscr. Lat. I p. 71, Ritschl have

sufficiently shewn this; the Ambrosian in Plaut. trin. 11 has retained *vocivas*, Ter. heaut. 90 the Bembine *vocivom*; the new corp. inscr. four times has *vocatio*, never *vacatio*; and an inscription of the age of Augustus *vocuam*: the *a* does not appear in inscriptions before the age of Domitian: Manil. I 13 *Hoc sub pace vacat* (Gembl. *vocat* other mss. which means the same) *tantum*: Jacob quite mistakes the meaning. **521** and **526** *corp. certa*: *certus* in Lucr. Cicero and the best writers sometimes approaches in meaning to *quidam*, and our and the French *certain*; or rather to *certus quidam*: *corp. certa* here = precisely 675 *certissima corpora quaedam*: comp. also 812 *alimur nos Certis ab rebus, certis aliae atque aliae res*; and VI 783 *Arboribus certis.* **523** the *omne* or *omne quod est* consists of *spatium* or *omne quod est spatium* and *corpora* in its widest sense, as shewn at length later in this book: see n. to 958: Wak. and others by placing the comma after *spatium* utterly pervert the argument. **525** *naviter* is found in Cicero, Terence, Horace: Lucr. has also *duriter*, twice *largiter*, often *uniter* and *longiter*: adverbs in *-iter* are very common in the older writers. *omne* or *omne quod est* is nomin. to *extat.* **529** so II 539 *penitus penetrari*; and VI 698. *retexi*: so 243 *contextum* for their structure: one cannot tell whether *retexi* is gov. of *possunt* or *queunt*: Lachmann's punctuation assumes the latter. **530** *temptata labare*: 537 *temptata labascit*; II 967 *dolore Temptari*; V 345 *cum res tantis morbis tantisque periclis Temptarentur*: *temptare* is a proper term for being assailed by disease. **531** *supra paulo*: he must refer to 485 foll., though it seems merely a part of the present argument. **532** *conlidi...frangi* = *dissolvi extrinsecus icta*: *findi sec.* = *penetrata retexi*: 534 535 are exs. of 530. **533** *nec findi in bina secando*, the expression which comes nearest to the technical Greek name ἄτομα or ἄτομοι, a literal rendering of which Lucr. with poetical tact always avoids. **534** *manabile*, a word formed by him to express what 494 he called *penetrale*: *manare* is a favourite word of his in similar senses. **536** Lucr. always says *quo magis* or *quanto magis* or, as once VI 460, *quam quoque magis*, —*tam magis*: never *quam m.*, *tam m.* **543** *supra*: 149 foll. **546** *supremo tempore* recurs III 579. **547** *reparandis*: this verb is often used by him in this poetical sense, to produce anew; as 550. With the above section may well be compared the words of Epicurus himself l. l. 41 ταῦτα δ' ἐστὶν ἄτομα καὶ ἀμετάβλητα, εἴπερ μὴ μέλλει πάντα εἰς τὸ μὴ ὂν φθαρήσεσθαι, ἀλλ' ἰσχύοντα ὑπομένειν ἐν ταῖς διαλύσεσι τῶν συγκρίσεων, πλήρη τὴν φύσιν ὄντα καὶ οὐκ ἔχοντα ὅπη ἢ ὅπως διαλυθήσεται: Plut. de plac. phil. I 3 p. 877 D gives a good definition of the atoms: Newton too would seem to have had Lucr. in mind when near the end of his optics, ed. Horsley IV 260, he wrote 'it seems probable to me that God in the beginning formed matter in solid massy hard impenetrable moveable particles, of such sizes and figures and with such other properties and in such proportion to space, as most conduced to the end for which

he formed them; and that these primitive particles being solids are incomparably harder than any porous bodies compounded of them, even so very hard as never to wear or break to pieces'. Farther on he speaks of 'particles of matter of several sizes and figures and several proportions to space, and *perhaps of different densities and forces*'. His particles agree in every point with those of Lucr. except in the concluding words. It appears from a most interesting discussion in Edleston's correspondence of Newton and Cotes p. 75 foll. that Cotes objected to one of the corollaries of his principia, unless he altered the last clause just quoted from his optics. Upon which Newton thanks him for explaining his objection and adds a fourth corollary, *Si omnes omnium corporum particulae solidae sint eiusdem densitatis neque absque poris rarefieri possint, vacuum datur*, thus coming to a complete agreement with Lucr.

551—576: if these first bodies did not set a limit to the division of things, nothing could come into being; for as things are destroyed more quickly than they are renewed, infinite time to come could not restore what infinite time past had gone on breaking up: again with solid first bodies the existence of soft things can be explained by help of void: with soft first bodies the existence of hard things cannot be understood. **553** *redacta* used absolutely without *in* or *ad* or some other prepos. is very rare: comp. Ter. heaut. 945 *eius animum...retundam, redigam, ut quo se vertat nesciat*; but both in Lucr. and Terence *eo* seems to be understood out of the clause with *ut*: *usque eo, ut*; as in Virg. ecl. IX 2 *vivi pervenimus, advena nostri...ut possessor agelli Diceret*; though Virgil's expression is shewn to be proverbial from Petron. sat. 77 *satis vivus pervenero*: comp. too Caes. bell. Gall. II 27 5 *quae facilia ex difficillimis animi magnitudo redegerat*; IV 3 4 *multo humiliores infirmioresque redegerunt.* **554** *a cer. tem.*: 767 *Alternis gignuntur...tempore ab omni*; Livy XXIV 46 4 *imber ab nocte media coortus*; Ov. ex Ponto II 3 79 *quo sit primum nobis a tempore cultus*; Hor. sat. I 6 94 *A certis annis aevum remeare peractum*: comp. too expressions met with in Caesar again and again, such as *positis castris a milibus passuum* XV: *ab* seems to mean 'within a time' or 'distance', 'beginning from', and to resemble the usage illustrated at VI 968 *ab igni.* **555** *perv. ad auct.*: comp. II 1121 *Hic natura suis refrenat viribus auctum* and V 846. *perv. ad* or *in* 'to arrive at': so Cicero *pervadere in Italiam, in aures* and the like; but *pervadere animos* 'to pervade the minds'; and so Varro de ling. Lat. VII 14, cited by Lach., quotes Accius *Pervade polum* cet. and explains *quare quod est* 'pervade polum' *valet vade per polum.* **557** foll.: comp. the passage quoted from Newton in the next section. **557** the constr. is nowise clear: the simplest course seems to be to suppose the clause a double one, *quod longa diei aetas*, [hoc est] *infinita aetas ant. temp.*: comp. 233 *Infinita aetas consumpse anteacta diesque*; from which Faber conjectures here *longa dies et*: comp. too Enn. ann. 401 *longinqua dies quod*

fecerit aetas. [558 *Inf. aet. temp.*: Prop. I 4 7 *formosi temporis aetas.*] 559 *Quod*: for position in sentence see n. to VI 789. 560 *relicuo*: this word, spelt sometimes *reliquus*, is always 4 syll. in Lucr. and the older writers, who refused to unite the last two syll.: the first is only lengthened by metrical necessity, as it is short in metres which admit that quantity, and was never lengthened after it became a trisyll. Many, Virgil Horace etc., avoid the word: see Lach. p. 305: if Manil. II 734 be not admitted, Persius Silius Statius Juvenal first used it as a trisyll.: comp. V 679 *Consequë*, the principle of which is the same. 564 comp. V 847 *Nec potuere cupitum aetatis tangere florem.* 566 *cum constant*: yet II 469 *Scilicet esse globosa tamen, cum squalida* constent; which is the ordinary usage. [See Luebbert, ind. nach caus. u. adv. *quom* p. 112 foll.; Autenrieth, *quom* p. 309 foll.; and Ussing to Amph. 746.] Lamb. an excellent judge says 'ne quis semidoctus putet reponendum *cum constent*; illo enim modo potius loquebantur antiqui': the *potius* perhaps goes too far: yet Lucr. can use the indic. when, as here, you can translate 'when or while at the same time': comp. II 690 *Cum tamen...necesse est*; and VI 130, which is essentially similar, and note there: comp. too II 29 *Cum tamen...curant*; 859 *quae cum ita sunt tamen ut*; III 363 *praesertim cum...nequimus*; 411 *Cum cohibere nequit*; VI 140 *cum tamen alta Arbusta...haurit*, where Lamb. again remarks '*cum* iunxit cum indicativo, quod M. Tullio et bonis scriptoribus usitatum est, tametsi secus existimet vulgus': the *tamen* would seem to make a difference, [expressing as it does the concession usually expressed by the subjunctive and so keeping the indicative.] *possit reddi*=possit ratio reddi; answering precisely to 572 *Non poterit ratio reddi*: comp. II 179 and V 197 *aliisque ex rebus reddere multis* with III 258 *quo pacto ...vigeant rationem reddere* and IV 572 *rationem reddere possis...quo pacto*: III 354 *adferet*=rationem adferet: see Cicero quoted there. For the involved constr. comp. n. to III 843. 571 *silices* denote the hard blocks of volcanic basalt with which the Romans paved their streets and roads: VI 683 of Aetna *silicum suffulta cavernis*: with Livy and others *silice sternere* was the technical term for this paving. 572 *funditus...fundamenti*, like *penitus penetrari*, *apparet aperte* and the like. In illustration of 565—576 hear what Newton says in his optics p. 251 'all bodies seem to be composed of hard particles: for otherwise fluids would not congeal...Even the rays of light seem to be hard bodies...and therefore hardness may be reckoned the property of all uncompounded matter... Now if compound bodies are so very hard as we find some of them to be, and yet are very porous and consist of parts which are only laid together, the simple particles which are void of pores and were never yet divided must be much harder. For such hard particles being heaped together can scarce touch one another in more than a few points, and therefore must be separable by much less force than is requisite to

break a solid particle whose parts touch in all the space between them without any pores or interstices to weaken their cohesion'.

577—598: again we do see things in being: they must have had first-beginnings: could then these first-beginnings, if soft, have withstood the blows of infinite time? the persistency too of specific marks in living creatures seems to prove an unchangeable matter at bottom. 578 *quaeque sup. cor. rebus*=superare cuique rei sua corpora: comp. 599 *extremum quodque cacumen*, and n. to II 371. 579 *superare*=superesse, as 672 and 790 repeated II 751; in each case in the infin.: lexicons shew that the word has this sense in the best authors: [see Mayor to Juv. XII 68.] 580 *clueant* again=sint. 582 *Discrepat...potuisse*: I know no other instance of this constr.: but, as it has the meaning, perhaps it takes the constr. of *non convenit*: comp. too IV 1088 *fieri.. repugnat*, and n. to IV 766. 586 *foed. nat.* a favourite expression: so II 254 *fati foedera*; also *foedere* alone: so in Virgil *foedera* and *foedere*; and Manil. II 301 340 359 379. 587 *sancitum* an almost unexampled form; the instances quoted from Cicero are changed to *sanctus* in the latest editions: in Pison. 90 Halm reads *sancitum*, though the mss. have all *sanctum*: he refers to Diomedes p. 368 (370 Keil); but he only cites our passage, and from Cassius Severus *lege sancitum est.* 588 *quin constant*: in ed. 1 I followed Lach. who says 'scribendum est *constent.* nam Lucretius *quin* cum indicativo non iungit, nisi ut eam coniunctionem quae est *etiam* adiciat, aut certe id pronomen quod prope idem significat, id est *ipse.* hoc semel usus est in libro II 799 *Lumine quin ipso mutatur*'. But when the cases where *quin* is followed by *etiam*, or where it introduces a dependent relative clause, as *quid dubitas quin* and the like, are deducted, the remaining instances in Lucr. are too few I think to let us infer that he would not here use the indic. which is more emphatic and in accordance with the usage of the best writers, Plautus for instance and Livy so far as my observation goes. The passages of Lucr. which can well be brought into comparison are these, I 1080, repeated II 237, *Quin...pergat*, and VI 321 *Quin...veniat*, in all of which the preceding infinitive clause seems to make the subj. necessary; and II 1079 *Quin...siet* where the preceding *Huc accedit ut* makes it uncertain whether *quin siet* is in apposition with or dependent upon *quae gignatur* cet.: VI 321 indeed *Quin...veniat* both the above reasons can apply. *quin constant* therefore is in apposition with *Nec commutatur*, *quin* being properly the interrogative *quin* i.e. *qui ne*; used so much by all writers with the 2nd pers. sing. and 1st pers. plur. *quin is? quin imus?* and the like. Plautus has scores of examples like these, trin. 932 *Lubet audire nisi molestumst.—Quin discupio dicere*; curc. 251 *Palinure, quid stas? quin depromuntur mihi, Quae opus sunt.* Precisely similar to our passage are these, epidicus II 3 1 *Nullum est opinor ego agrum in agro Attico Aeque feracem:...quin...Decutio argenti tantum*

quantum mihi lubet; Men. 687 *Neque edepol te defrudandi causa posco: quin tibi Dico uxorem rescivisse*; mercator 215 *non visus est* [suspicari]: *Quin quicque, ut dicebam, mihi credebat*; Catull. 61 101 *Non tuus...vir ...A tuis teneris volet Secubare papillis,...quin...Inplicabitur in tuum Complexum*; [Cic. epist. III 6 2 *quin..te antea..decessurum fuisse*; VIII 2 1 (Caelius) *quin ego ..obstupui et mihi visus sum captus esse*; ad Q. fr. I 3 10 *quin illud maereo.*] Of many instances in Livy take II 29 8 *nec sisti posse..quin..accendi magis discordiam quam sedari*; IX 16 19 *nemo unus erat vir, quo magis innixa res Romana staret: quin eum parem destinat* cet.; 25 2 *nec Capua ipsa crimine caruit*; *quin Romam quoque..ventum est*; XXII 41 4 *Hannibal id damnum haud aegerrime pati: quin potius credere*; XXV 36 14 *luctus ex morte eorum non Romae maior quam per totam Hispaniam fuit: quin apud cives partem doloris...publica trahebat clades*; XXXI 31 9 *neque infitias imus... quin contra hoc et vos et omnes gentes scire volumus*; XXXV 26 10 *nihil ea res animum...imminuit: quin contra...affirmabat.* I have noted four instances in the speeches of Sallust's Historiae. [So perhaps Plaut. Amph. 629 *Ita dis est placitum, voluptatem ut maeror comes consequatur, Quin incommodi plus malique ilico adsit, boni si obtigit quid.*] **589** *variae*, a favourite epithet of *volucres*, meaning the different species: comp. V 825 *volucres variantibu' formis*: so *variae pecudes, gentes, arbores, varii sonitus, colores, odores, mundi, conexus, varia tempora*, etc. **593** *revicta* = simply *victa*: V 409 *revictae* = perhaps *vicissim victae*.
594 foll. repeated from 75 foll. Hear again what Newton l. l. p. 260 says to illustrate this and the preceding section 557—564, 'while the particles continue entire, they may compose bodies of one and the same nature and texture in all ages; but should they wear away or break in pieces, the nature of things depending on them would be changed. Water and earth composed of old worn particles and fragments of particles would not be of the same nature and texture now with water and earth composed of entire particles in the beginning. And therefore that nature may be lasting, the changes of corporeal things are to be placed only in the various separations and new associations and motions of these permanent particles, compound bodies being apt to break not in the midst of solid particles, but where those particles are laid together and only touch in a few points'.

599—634: these first-beginnings have parts, but their parts are so small as not to admit of existence separate from the atom: the atom therefore has not been formed from a union of these parts, but they have existed in it unchangeably from eternity: such parts then are but one more proof that the first-beginnings are of everlasting singleness: again without such ultimate least things, the smallest and largest thing will alike consist of infinite parts, and thus will be equal: again if nature went in division beyond the atom, such least things as these parts of the

atom could not have the qualities which birth-giving matter must have, weight, motion, power of striking and clashing and combining.—A passage necessarily obscure, because dealing with one of those questions which utterly elude the grasp of human reason. Epicurus building up his dogmatic system and hating all scepticism on first principles, determined that his atoms should have size shape weight, in his own words *μέγεθος σχῆμα βάρος*, and therefore extension. But if extension, then parts; and how can that which has parts be indivisible? This is the question which Lucr. here answers. That the atoms of Epicurus though extremely small were finite and had parts, abundant proof was given in Camb. journal of phil. I p. 28 foll. and 252 foll. Comp. Epicurus quoted a page after this and Stob. ecl. I 10 14 *εἴρηται δὲ ἄτομος, οὐχ ὅτι ἐστὶν ἐλαχίστη ἀλλ' ὅτι οὐ δύναται τμηθῆναι, ἀπαθὴς οὖσα καὶ ἀμέτοχος κενοῦ*: Simplic. to Arist. phys. p. 216 a, a few lines from end, though he varies in his testimony about Democritus, says of Epicurus *ἀμερῆ μὲν οὐχ ἡγεῖται, ἄτομα δὲ αὐτὰ διὰ τὴν ἀπάθειαν εἶναί φησι*: see the journal l. l. for proof that Democritus and Leucippus held the same doctrine which they probably derived from the pythagoreans. Doubtless the epicureans long waged bitter war with the peripatetics who held the infinite divisibility of things: see Alex. Aphrod. to Arist. met. p. 745 4 Bon. *πολλὰς γὰρ εὐθύνας δέδωκεν ἡ τὰ ἄτομα μεγέθη εἰσάγουσα δόξα*, an imitation of the *περὶ ψυχῆς* I 4: one of the commonest terms with Epic. for his atoms is *ὄγκοι* or bulks. Lucr. therefore seeks to maintain at the same time that cardinal point in the epicurean physics that atoms are impenetrable and indestructible, and yet possessed of weight shape and extension, and to shew how particles thus endowed are incapable of further division: atoms have parts, but these parts are *minima*, the *ἐλάχιστα* of Epicurus, not able to exist alone, abiding therefore in the atom from all eternity in unchangeable juxta-position.

599 *extr. quodque cac.*: see notes 1 for the probable nature of the hiatus: the expression resembles therefore 578 *quaeque...corpora rebus*; see note there: so that the *extr. quodque cacumen* here exactly equals the *extremum cuiusque cacumen* of 749, with which we have compared it in the next page. **600** *Corporis* etc. is of course the atom: *corpora* or *corpora prima* we have already found to be among his commonest terms for his atoms: 483 *Corpora sunt porro partim primordia rerum*; and so Stobaeus l. l. and Plut. de plac. phil. I 3 p. 877 D say that Epicurus defined *τὰς ἀρχὰς τῶν ὄντων σώματα λόγῳ θεωρητά κ.τ.λ.*: *corpus* is thus used in the sing. in 606 *naturam corporis*, and II 484 *cuiusvis in brevitate Corporis*, and 490 *totius corporis eius*: though our present passage has been grievously misunderstood, the words added would seem to preclude any doubt, as well as the tenour of the whole passage: *illius qu. n. c. s. Iam nequeunt* he says; and so II 312 *Omnis enim longe nostris ab sensibus infra Primorum natura iacet; quapropter*

ubi ipsa Cernere iam nequeas: the *iam* implying that when you arrive at the atom, it is already far below the ken of sense. Lucr. never tells us what he conceived the magnitude of his atoms to be, and probably he never tried to represent it to his own mind: perhaps, if he had known them, he would have accepted the calculations of an eminent living authority upon molecular physics, who decides that if a drop of water were magnified to the size of our globe, the molecules composing it would be magnified to sizes varying from the size of shot to the size of billiard-balls. With this passage must be compared 749 foll. where he is blaming those who refuse to admit a limit to the division of things, *Cum videamus id extremum cuiusque cacumen Esse quod ad sensus nostros minimum esse videtur, Conicere ut possis ex hoc, quae cernere non quis Extremum quod habent minimum consistere in illis*: and with both passages Epicurus' own words in Diog. Laert. x 58 τό τ' ἐλάχιστον τὸ ἐν αἰσθήσει δεῖ κατανοεῖν ὅτι οὔτε τοιοῦτόν ἐστιν οἷον τὸ τὰς μεταβάσεις ἔχον οὔτε πάντως ἀνόμοιον, ἀλλ' ἔχον μέν τινα κοινότητα τῶν μεταβάντων διάληψιν δὲ μερῶν οὐκ ἔχον...ταύτῃ τῇ ἀναλογίᾳ νομιστέον καὶ τὸ ἐν τῇ ἀτόμῳ ἐλάχιστον κεχρῆσθαι. μικρότητι γὰρ ἐκεῖνο δῆλον ὡς διαφέρει τοῦ κατὰ τὴν αἴσθησιν θεωρουμένου, ἀναλογίᾳ δὲ τῇ αὐτῇ κέχρηται· ἐπείπερ καὶ ὅτι μέγεθος ἔχει ἡ ἄτομος κατὰ τὴν ἐνταῦθα ἀναλογίαν κατηγορήσαμεν, μικρόν τι μόνον, μακρὸν ἐκβάλλοντες. Epicurus and Lucr. are each comparing the ἐλάχιστον or *minimum* of an atom with the ἐλάχιστον or *minimum* in a visible thing. What is the *cacumen* of Lucr. in 599 and 749? Epicurus wrote περὶ τῆς ἐν τῇ ἀτόμῳ γωνίας, where he doubtless treated of the present question: if then a visible thing has an angular form, the τὸ ἐν αἰσθήσει ἐλάχιστον or *cacumen* seems to be the apex of the angle, which before it vanishes, appears to sense to be without parts and the least conceivable, and not to belong to what is on one side more than to what is on its other side: if again the form be spherical, the *cacumen* would seem to be the outermost surface edge at any point, and so with other shapes. The same analogy Epicurus and Lucr. hold to exist in the extremely small, but yet extended atom: there seemed to them no reason why a *cacumen* or *minima pars* should part off to one side more than the other, and therefore it would remain in the atom in eternal equipoise. Epicurus in his intricate prose might have dwelt on this more fully than Lucr. could do in his verse: the poet therefore seems tacitly to assume it and to pass *in medias res*; and he was right in so doing. In the visible thing however the *cacumen seems* to be a *minimum*, in the atom it *is* a *minimum*, so small that nothing can be smaller and exist. From II 483 foll. it would appear that three of these *minimae partes* or *cacumina* were the fewest that could exist in an atom. **601** *id*, the *cacumen* of course: it has no parts, but is itself one of the parts of the atom, having no conceivable existence apart from the atom. **602** *minima*: in Luc. this word, when it has a physical meaning, appears always to be, like Epicurus' ἐλάχιστοι, a technical term for the smallest thing that can exist, or the smallest effect that can be produced; and in this sense occurs ten or eleven times in the poem: so Cic. de fin. I 20 *ne illud quidem physici credere aliquid esse minimum*, and v 78 *ea nos mala dicimus, sed exiguas et paene minima.* **604** *alterius*, of the atom. *ipsum* is emphatic, 'in its very essence'. **605** *ex ordine*, having each so existed without possible shifting of position. **608** *unde* seems to have *in eo* i. e. *in corpore*, in the atom, for its antecedent: [Hirt. b. Gall. VIII 14 5 *aciemque eo loco constituit unde tormento missa tela in hostium cuneos conici possent*; 35 1 *unde* (=ut inde) *paulatim frumentum in oppidum subportarent.*] **609** *Sunt igitur*: parts of this sort are only a further proof that the atom is single and impenetrable. **611** not like *res*, formed from a union of such parts, but of everlasting singleness, because its parts cannot exist out of the atom. **612** *Sed magis*=potius: so 481, II 97, 428, 814, 869, 1086, III 819, 982, v 1203. **613** *iam*, as 601: when you get to the atom, division stops: see n. to II 426. In illustration of the above argument of Lucr. I cannot refrain from quoting out of many the following sentences of Henry More: immortality of the soul, preface 3 'I have taken the boldness to assert that matter consists of parts indiscerpible, understanding by indiscerpible parts particles that have indeed real extension, but so little that they cannot have less and be anything at all, and therefore cannot be actually divided:...the parts that constitute an indiscerpible particle are real, but divisible only intellectually, it being of the very essence of whatever is, to have parts or extension in some measure or other; for to take away all extension is to reduce a thing only to a mathematical point, which is nothing else but pure negation or nonentity'. Ibid. I 6 5 'it is plain that one and the same thing, though intellectually divisible, may yet be really indiscerpible. And indeed it is not only possible, but it seems necessary that this should be true'.

615 and **621** *parvissima* used apparently, because *minimum* is wanted to denote an absolute least thing; the word recurs III 199 and is quoted by Nonius from Varro: with this and what follows comp. Epicurus himself in Diog. Laert. x 43 οὐδὲ γάρ, φησὶν ἐνδοτέρω, εἰς ἄπειρον ἡ τομὴ τυγχάνει, ἐπειδὴ αἱ ποιότητες μεταβάλλονται, εἰ μὴ μέλλει τις καὶ τοῖς μεγέθεσιν ἁπλῶς εἰς ἄπειρον αὐτὰς ἐκβάλλειν. **617** *pars*=dimidia pars, understood from the context: Livy XXXI 26 2 *dimidia parte militum... dimissa, cum parte ipse.. consedit,* .. 6 *diviso deinde exercitu rex cum parte,...cum parte*; XXV 19 3 *pars dimidia cives, pars socii*; VIII 4 4 *cur non alter ab Latinis consul datur? ubi pars virium, ibi et imperii pars esto*; [VI 27 6 *quae indicatura sit demersam partem a parte civitatis*: see also n. to II 200; Caes. b. Gall. VII 32 5 *fore uti pars cum parte civitatis confligat.*] **618** *praefiniet*: *prae* seems to express the getting before and so stopping: comp. *praecludo* and the like. **619** *rerum sum-*

mam is almost a play on words: it means the universe of things, and at the same time the largest thing conceivable in opposition to *minimam*. *escit* is quoted by Gellius xx 1 25, *nec escit* for *non erit* and *escunt* by Cicero, from the XII tables: Enn. ann. 486 and Accius 266 have *superescit*; Paulus Festi p. 188 *obescet*. [For *escit* see Wordsworth's Fragments and Specimens p. 511.] **620** *Nil erit ut dist.*=nil distabit: comp. III 715 *haut erit ut possint*: so *non est ut possis, est ut possit, est quoque uti possit, est ut percipiat, est ut videatur*; *non erat ut fieri posset*; v 715 *Est etiam quare possit*: *fit ut, fit uti* are still more common: he ventures to say VI 727 *fit uti fiat* and 729 *fit uti fiant*. **622** each will alike have infinite parts, and by the old paralogism would be equal, because all infinites are equal: precisely thus the Indian atomist Kanadi declared there would be no difference in size between a mustard seed and a mountain, a gnat and an elephant, each alike containing an infinity of particles: see Daubeny's atomic theory p. 8: Henry More too l. l. argues 'thus a grain of mustard seed would be as well infinitely extended as the whole matter of the universe, and a thousandth part of that grain as well as the grain itself'. Zeno the Eleatic by like reasoning concluded that, if things were 'many', they would be at once small and great; so small as to be without magnitude, so large as to be infinite in magnitude. Bentley in his Boyle lectures brandishes this weapon in the faces of the epicureans as Lucr. does against the peripatetics. Newton in his 2nd letter to him admirably refutes the fallacy, giving at the same time its clearest exposition. As we shall again encounter this fallacy in Lucr. I will cite a few lines: 'I conceive the parallogism lies in the position that all infinites are equal. The generality of mankind consider infinites no other ways then indefinitely; and in this sense they say all infinites are equal; though they would speak more truly if they should say they are neither equal nor unequal, nor have any certain difference or proportion one to another. In this sense therefore no conclusion can be drawn from them about the equality proportions or differences of things, and they that attempt to do it usually fall into parallogisms. So when men argue against the infinite divisibility of magnitude by saying that if an inch may be divided into an infinite number of parts, the sum of those parts will be an inch; and if a foot may be divided into an infinite number of parts, the sum of those parts must be a foot; and therefore since all infinites are equal, those summs must be equal, that is an inch equal to a foot; the falsness of the conclusion shews an error in the premisses; and the error lies in the position that all infinites are equal'. **623** *Quod quoniam*: see n. to 82 *quod contra*. **625** *ea*, the *minimae partes*. *iam*, as 601 and 613: when you are come to them. **626** *quae*, the same *minima*. **627** *Illa quoque*, those atoms too, of which the *minima* are parts. *esse ...fatendum*: on the omission of *est* comp. n. to 111. **628** if nature had gone in division beyond the atom, even to these absolutely least parts of the atom. **631** *part. aucta*=625 *praedita part.*: so III 626 *Quinque...sensibus auctam*; Catullus 64 165 *quae nullis sensibus auctae*; v 723 *quaecumque est ignibus aucta*. **632** *habere* belongs of course to *possunt*, as well as *debet*; so that it is perhaps best taken as another instance of that involved structure which I have illustrated at III 843: *non possunt ea habere quae d. g. m.*: comp. 648 649. *ea quae*, all which properties the atoms have: they possess size shape weight, which enable them, as we shall see, to move, to clash, and join together; none of which functions those *minimae partes* destitute of all qualities, if existing alone could perform. **633** *conexus, conecto, conixus, conivere, conubium* in our mss. and all good mss. are always spelt with one *n*: there is no authority whatever for *nn*. **628—634** what Lucr. felt and meant to express in these vss. might be illustrated by these words of Prof. Maxwell in his Theory of heat p. 285: 'we do not assert that there is an absolute limit to the divisibility of matter: what we assert is that after we have divided a body into a certain finite number of constituent parts called molecules, then any further division of these molecules will deprive them of the properties which give rise to the phenomena observed in the substance'.

635—644: to maintain therefore with Heraclitus and his followers that fire is the element of all things is absurd.—Lucr. having now established his two great principles of an unchangeable matter and a void, before he proceeds at 921 to explain by them the nature of things, first in order to make their truth still more manifest, examines the elements of Heraclitus Empedocles Anaxagoras and other philosophers and shews their utter insufficiency. The foundation therefore being worthless, the superstructure must fall to pieces: Principiis tamen in rerum fecere ruinas et graviter magni magno cecidere ibi casu. Of all these men he speaks with admiration or tolerance, except Heraclitus whom he assails with a certain passion and violence. Now that the star of the old Ephesian seems again in the ascendant, such an attack will not meet with much sympathy; the motive however is plain enough: in him he is combating the stoics, the bitter enemies of Epicurus, Heraclitus standing in the same relation to them that Democritus stands to Epicurus. This will appear from the fact that it is only from 690 to 704 that he addresses himself to Heraclitus; from 645 to 689 it is always 'they': *faciant, cernunt, amittunt* etc.; and by such indefinite plurals he elsewhere denotes the stoics: see n. to 465. Indeed 643 644 seem to shew, as we might expect, that he was not insensible to that style and those sayings which sound so grandly even now in the few fragments that have survived. One in the position of Lucr. could only see and criticise a rival philosopher from his own point of view: even Aristotle is taxed with thus dealing with Heraclitus. The πῦρ ἀείζωον φρόνιμον, the πάντα

οἰακίζων κεραυνός, the *ignis sincerus et sine ullius materiae permixtione, ut putat Heraclitus*, would seem to Lucr. a mere outrage on nature and reason; and therefore he will have the heraclitean and stoical fire to be his own fire. The epicurean in Cic. de nat. III 35 speaks to the stoic Balbus in the same sense: *omnia vestri, Balbe, solent ad igneam vim referre, Heraclitum, ut opinor, sequentes, quem ipsum non omnes interpretantur uno modo; qui quoniam quid diceret intellegi noluit, omittamus: vos autem ita dicitis, omnem vim esse ignem* cet. **635** *Quapropter* has clear reference to what just precedes: simple fire as an element cannot have the properties which birth-giving matter must have, *conexus pondera* etc.: this word alone would refute the monstrous corruptions, *ni* and *multis*, which Lamb. and all subsequent editors introduce in 628 and 631. **638** *dux* has the double meaning of leader in war, and chief of a sect: Hor. epist. I 1 13 *quo me duce, quo lare tuter*; Quintil. inst. V 13 59 *inter duos diversarum sectarum velut duces non mediocri contentione quaesitum.* **639** *Clarus*: a play on its double meaning, as 475 *Clara accendisset.* *Clarus ob obscuram*: see p. 15; and comp. Lucan. I 186 *imago Clara per obscuram...noctem*: for constr. comp. Hor. epist. II 2 32 *Clarus ob id factum*; Mela II 26 *ob multa memorabilis est*; Tac. ann. III 75 *ob id fama celebratior.* ὁ σκοτεινός appears first in the de mundo 5 p. 396 b 20 attached to his name: Cic. de fin. II 15 *Heraclitus cognomento qui* σκοτεινός *perhibetur, quia de natura nimis obscure memoravit*; Sen. epist. 12 7 *Heraclitus cui cognomen fecit orationis obscuritas*: how much the term was in vogue might appear from Livy XXIII 39 3 *Legati ad Hannibalem missi, Heraclitus cui Scotino cognomen erat*: which must have been given in jest. [See Schuster in Acta soc. phil. Lips. III p. 355 B; and Tertull. de anima 2 (vol. II p. 560 Oehler) *Heraclitus ille tenebrosus*: a more literal translation than *obscurus.* If the 'de mundo' was later than Hannibal's time, then the allusion in Livy would be the oldest reference to the epithet.] **639** *inanis*, i.e. Graios. **640** *Quamde*: Festus s. v. quotes this passage and two from Ennius: ann. 29 and 139. **641** *stolidi*: 1068 *Sed vanus stolidis*: in both cases with reference to the maintainers of stoical doctrines: he retorts upon them their own term of reproach. *adm. am.*: Hor. epist. II 2 58 *mirantur amantque.* **642** *Inv. ver.*: Ter. heaut. 372 has *inversa verba*, where the meaning is as uncertain as here: Quintil. inst. VIII 6 44 ἀλληγόρια, *quam* inversionem *interpretantur, aliud verbis aliud sensu ostendit, etiam interim contrarium*; and this sense admirably suits the extant fragments of Heraclitus. Cic. de orat. II 261 uses *immutata oratio* with this meaning, *inversio verborum* with that of our irony. The expression might apply too to words in a forced and unnatural position, and therefore obscure. **644** *fucata sonore* seems a very bold metaphor, worthy of Heraclitus.

645—689: how could simple fire produce such a variety of things? it is of no use to condense or rarefy fire, if it always remains fire: nay they deny void without which even this condensing and rarefying is impossible. But if they say the fire is extinguished in the process, they make things come from nothing. The truth is there are certain first bodies which are not like fire or any thing in being, but which produce fire and all other things alike by their varied shapes motions arrangements collisions. **645** foll. Heracl. frag. 41 Schl. πυρὸς ἀνταμείβεται πάντα καὶ πῦρ ἁπάντων, ὥσπερ χρυσοῦ χρήματα καὶ χρημάτων χρυσός: and Themistius ap. Schleierm. p. 95 says in exact conformity with Lucr. Ἡράκλειτος τὸ πῦρ οἴεται μόνον στοιχεῖον καὶ ἐκ τούτου γεγονέναι τὸ πᾶν: Brandis however Gesch. d. Entwick. d. Gr. Phil. p. 67 says that this fire or warm exhalation of Heraclitus is that for which all things are exchanged, as wares for gold; but it changes itself as little into the things, as gold changes into these wares; and that later interpreters misapprehended him. Grote too, Plato I p. 28, says 'when we put together all that remains from him, it appears that his main doctrine was not physical, but metaphysical or ontological: that the want of adequate general terms induced him to clothe it in a multitude of symbolical illustrations, among which fire was only one, though the most prominent and most significant.' However that be, Lucr. is here speaking of his followers, espec. the stoics, as remarked above. **648** *rarefieri* and *rarefacere* always in Lucr. have ē: so *vacēfit putrēfactus expergēfactus*, all more than once: *confervēfacit*; *patēfecit* and *patēfiet* once, but oftener *patĕf.*; so *calĕfecit, cinĕfactus*; *liquēfit*, but *liquĕfacta*: so *labĕfactat* etc. *labĕfactus, tepĕfactus, timĕfactus, conlabĕfactus, conlabĕfiunt*: *facit are* is uncertain: the *e* was originally long, the Latins having had a strong tendency to shorten final syllables. Ovid and Catullus, so far as they use such words, have much the same varieties of quantity as Lucr.: Ritschl opusc. II p. 618—621 argues that Plautus always has ĕ when the prec. syll. is short, as *călĕfacio*, ē when that syll. is long, as *pūtēfacit.* **649** *super* =insuper; as III 672 901 V 763 VI 514: this sense is found in Virgil Aen. I 29 II 71 VII 462, and I think V 697 *Implenturque super puppes*, and in Ovid met. IV 705 XII 206 *Annuerat dederatque super, ne.* Ussing is right in making the constr. of this sentence to be 'si partes ignis eandem naturam, quam totus ignis habet, super haberent': it is another instance of that involution of words illustrated at III 843: but I do not take *super haberent* as he does; but simply as='etiam haberent': comp. 758 *quid a vero iam distet habebis.* **653** *variantia* found also III 318 seems to occur only in Lucr. and to be used for *varietas* for metrical reasons: thus *aegror* for *aegritudo, maximitas* for *magnitudo, pestilitas* for *pestilentia, dispositura* for *dispositio, differitas* for *differentia, refutatus* for *refutatio, emissus* for *emissio, commutatus* for *commutatio, opinatus* for *opinatio, formatura* for *conformatio*, are confined to him, or to him and his constant imitator Arnobius: *satias* for *satietas* is more gene-

ral, and *impete* for *impetu*; but Lucr. has also *impetis* and *impetibus*. **655** I know no other instance of *id quoque* used as here for 'in that way too' or perhaps simply 'again': *quod genus* which is common in Lucr. appears to be not unlike: *id* occurs more than once in Plautus and Terence with the sense of *propterea*: miles 1158, Amph. 909, eunuch. 1005. *faciant* 'assume': so III 878 *facit esse sui quiddam super* and IV 825; also II 485 *fac enim*, a common use. **658** *fugitant* with an inf.: so IV 324 (299) *fugitant vitantque tueri*, and VI 1239. **659** *viai* belongs to *Ardua* also. **665** *alia*: *if* they admitted void, they might account for the condensation and rarefaction of fire. But *this* course they preclude themselves from by denying the existence of void. If then they preclude in some other way, which I do not comprehend, they believe fire can be extinguished, then as fire is their sole element, and as it will thus be annihilated, things will have to be created out of nothing. *potesse* is found II 225 and 1010: he also has *potis est*, *potissit*, and *pote* more than once: see Lach. to V 880, and Fleckeisen krit. Miscellen p. 44—47, who restores *potisset* three times in the orations of Cicero. **666** *mutareque*: this annexing *que* to *ĕ*, which Virgil and Ovid appear wholly to avoid, is very common in Lucr. as in the best prose writers. **667** *reparcent* =simply *parcent*, as 593 *revicta*=victa: Plaut. truc. II 4 25 *repercis saviis*=vicissim parcis. **670 671** are thrice repeated in the poem, Lucr. intending thereby to lay stress on the doctrine involved: see the passage from Epicurus cited after 689. **670** *quodcumque*=*si quod* or *quoties aliquid*: then *hoc* has reference to the whole of this clause, this passing out of the fixed limits which held the thing in; it involves therefore the same doctrine as 76 so often repeated, *finita potestas denique cuique Quanam sit ratione atque alte terminus haerens*: things have certain bounds within which they may range and continue what they are; when this limit is passed, they die and pass into another condition. The expression much resembles that of Epicharmus quoted by Diog. Laert. III 11 *ὃ δὲ μεταλλάσσει κατὰ φύσιν κοὔποκ' ἐν ταὐτῷ μένει, Ἕτερον εἴη κα τόδ' ἤδη τοῦ παρεξεστακότος*, though the thought is different. **672** *aliquit*, *quicquit*, *aliut* are not unfrequently met with in our mss.: in A oftener than B, once or twice in both: the *t* has naturally been retained where no ambiguity is occasioned, such as by *at*, *quot* for *ad*, *quod*.

675 *Nunc igitur*: see n. to 169. *certiss. corp. qu.*: see n. to 521. **677** *abitu aut aditu*: comp. 457 where the contrary is asserted of mere *eventa*. **680** *dec. ab.*=*abitu* of 677; *alia adtr.*=*aditu*; and so 800 *demptis paucis*=*abitu*; *paucis tributis*=*aditu*. **681** *alia* is clearly confirmed by the *τινῶν δὲ καὶ προσόδους* of Epic. quoted in the next page. **683** *omnimodis* often used by Lucr. as an adv.=omnibus modis: *multimodis* too is used by Terence and him=multis modis: Cic. orator 153 *saepe brevitatis causa contrahebant ut ita dicerent* multi' modis, vas' argenteis cet.; so that *omnimodis* seems formed by Lucr. on a false analogy: Plaut. trin.

931 *nimium mirimodis mirabilis*: there is no adj. *omnimodus* or *multimodus*, any more than *omnigenus*; *omnigenum* in Virgil is for *omnigenarum*: Lucr. uses *omne genus* like *id genus*, *quod genus*. **684** *quaedam corp.*=*certiss. cor. qu.* of 675=*corpora certa* of 521; the atoms of course. **685** comp. 632—634. *ordo positura figurae*: these words, repeated II 1021, come from Democritus: see Arist. metaph. VIII 2 p. 1042 b 11 *Δημοκρίτῳ μὲν οὖν τρεῖς διαφορὰς ἔοικεν οἰομένῳ εἶναι· τὸ μὲν γὰρ ὑποκείμενον σῶμα τὴν ὕλην ἓν καὶ ταὐτόν, διαφέρειν δὲ ἢ ῥυσμῷ ὅ ἐστι σχῆμα, ἢ τροπῇ ὅ ἐστι θέσις, ἢ διαθιγῇ ὅ ἐστι τάξις.* **686** *mutatoque* cet. i.e. quaeque mut. ord. cet. see n. to 718. **687** *igni sim.*: IV 363 *paulum simulata*; Forc. cites Aen. III 349 and Cic. ad Att. IX 8 for the same sense. [So *nec mi similat* (=similis est) is found in Pompeian inscr. n. 1877.] **688** *rei* gen. and dat. forms in Lucr. either two long syll. or one: *rĕi* is not found: so *ēi*; but Ritschl notes that in the 7 places where *ei* occurs, it is always the last foot of the verse: also *fidēi* not *fidĕi*. **689** *adiectu*: IV 673 *naris adiectus odoris Tangat*; V 566 *ignes lumina possunt Adicere*: the *ad* implies the reaching the object aimed at. With the whole argument of **665—689** should be compared Epicurus himself in Diog. Laert. X 54, *τὰς ἀτόμους νομιστέον μηδεμίαν ποιότητα τῶν φαινομένων προσφέρεσθαι πλὴν σχήματος καὶ βάρους καὶ μεγέθους καὶ ὅσα ἐξ ἀνάγκης σχήματι συμφυῆ ἐστί· ποιότης γὰρ πᾶσα μεταβάλλει, αἱ δ' ἄτομοι οὐδὲν μεταβάλλουσιν, ἐπειδήπερ δεῖ τι ὑπομένειν ἐν ταῖς διαλύσεσι τῶν συγκρίσεων στερεὸν καὶ ἀδιάλυτον, ὃ τὰς μεταβολὰς οὐκ εἰς τὸ μὴ ὂν ποιήσεται οὐδ' ἐκ τοῦ μὴ ὄντος, ἀλλὰ κατὰ μεταθέσεις μὲν πολλῶν, τινῶν δὲ καὶ προσόδους καὶ ἀφόδους. ὅθεν ἀναγκαῖον τὰ μὴ μετατιθέμενα ἄφθαρτα εἶναι καὶ τὴν τοῦ μεταβάλλοντος φύσιν οὐκ ἔχοντα.*

690—704: again why do the senses, as Heraclitus says, perceive fire truly, but nothing else? one might just as well deny the reality of fire and affirm that of all other things. **690** *res, rem, rerum*: see n. to 813. **692** *perdelirum* appears to be a *ἅπαξ λεγόμ.* **693** *contra s. ab s.*: comp. auctor ad Heren. II 9 *communes loci sunt cum accusatoris tum defensoris ab testibus contra testes, abs quaestionibus contra quaestiones, ab argumentis contra argumenta, ab rumoribus contra rumores*; Cic. de inv. I 4 *a mendacio contra verum stare*; ad fam. II 16 2 *ad bellum quidem qui convenit? praesertim contra eum cui spero me satisfecisse, ab eo cui iam satisfieri nullo modo potest*; Quintil. inst. VII 2 31 *alii a propositione accusatoris contraque loci oriuntur.* [See too Draeger hist. synt. vol. I p. 579 § 3.] *res contra repugnat* is found in III 353: and Cicero has the same construction. **696 697** that Heraclitus taught that the senses could not truly discern things, is certain: comp. Arist. metaph. I 6 at beg. and the authorities quoted by Bernays heraclitea p. 30; and the hippocratean *π. διαίτης* as there emended by him, *διὰ τούτων [τῶν αἰσθήσεων] γνῶσις ἀνθρώποισιν ἀγνωσίη*: but in what sense Heraclitus affirmed the senses could perceive fire truly, is far from clear: one would

have thought that the ξυνὸς λόγος alone could discern the πῦρ ἀείζωον, and that the material fire was as delusive as other things. Surely Lucr. cannot simply mean that, as Heraclitus held fire to be the sole element of things and the only real existence, therefore when sense perceived any other thing, it did not perceive it in its reality: when it perceived fire, it perceived real existence; without his having any expression of Heraclitus to warrant such a conclusion. Did Heraclitus teach that the everliving fire represented motion self-engendered which in a thousand ways, in the human body and through the whole of nature, produces heat or fire? comp. with this some theories of the origin of caloric and the sun's heat: all things else are phases of motion thwarted and turned from its natural course; fire alone gives to sense some apprehension of this real fire and movement at the bottom of all things.
699 *Quo ref.*: comp. 424 *Haut erit occultis de rebus quo referentes Confirmare animi quicquam ratione queamus*; Hor. od III 6 6 *Hinc omne principium, huc refer exitum*: it is a common meaning of the word in Cicero. **700** *qui* = quo, and refers of course to *quid*: on the infallibility of the senses, one of the foundations of Epicurus' philosophy, see IV 478—521. **701—704** it is usual with Lucr. after going through some important exposition and giving the more general and recondite reasons, to finish by some short argument appealing simply to the common sense of men, or to what they see going on before their eyes: see 759—762, 915—920, 984 (998)—987 (1001). **703** *relinquat*: see n. to 515, and III 40.

705—733: for these reasons all err alike who affirm that any one of the four so-called elements, fire air water earth, is the first beginning of things; or any two of these; or all four, as Empedocles teaches, that famous poet and philosopher of the famous island of Sicily. **705** *Quapropter* connects what follows with what just precedes precisely as in 635: the things formed out of such elements as fire air etc. are as much elements as they are. **707** *principium*: see notes 1 to 834. **710** *rerum naturas* = simply *res*: see n. to II 646. *vertier*: Lucr. has nearly forty of these infinitives, many of them more than once; but in every case the antepenult is long, as is the rule with others who use them, the exceptions being very rare, as *decipier* and *egredier* in Plautus, *accipier* in Novius. **715** *Ex igni, terra, atque anima, et imbri*: Lucr. is very irregular, compared with Cicero, in his use of copulae, mixing *et, atque, ac, que*, in every sort of combination. Often too, as here, contrary to Cicero's usage sentences are partly ἀσύνδετα, partly connected by copulae: comp. II 511, 875, 1063, 1084—5, IV 124, 229, 516—7, V 47, 1283—5, 1353, etc.: [so M. Marcellus ap. Cic. epist. IV 11 1 *amicorum, propinquorum ac necessariorum.*] *anima* is used for the element of air also V 236 *Aurarumque leves animae*; Enn. Epich. 3 *Aqua terra anima sol*, and Virg. ecl. VI 32; Enn. ann. 511 has *spiritus*: Lucr. has also V 1230

ventorum animas, VI 578 and 693 *animai turbida vis*, a sense not uncommon in the poets: Accius 11 *vela ventorum animae immittere*; Aen. VIII 403 *Quantum ignes animaeque valent*; Hor. od. IV 12 2 *animae Thraciae*; Aetna 311. *imbri* for water recurs more than once in Lucr.: 784, 785, VI 149; Enn. ann. 511: Ennius Virgil and Ovid use it for seawater: Empedocles too 128, 216, 286 has ὄμβρος for water generally. Arist. metaph. I 3 p. 984 at beg. enumerates several of these philosophers from Thales downwards; much longer lists are given by Sextus pyrrh. hypot. III 30 foll.; adv. math. IX 360 foll. and X 310 foll., this last passage occurring almost verbatim in the newly discovered work of Hippol. ref. om. haer. X 6 foll. **716** *quorum* appears to be governed of *cum primis*, not *est*: comp. Cic. de orat. II 224 *sapiens homo cum primis nostrae civitatis.* **717** *triq. terr. oris*, because it is the shape of its coasts that renders its lands triangular: Forc. cites Horace Quintilian Silius for this word applied to Sicily. *gessit* = tulit, 'produced': so *terra gerit fruges, malos platani* and the like: yet the notion may be 'bore in its womb', as VI 790 *semina...Quod permixta gerit tellus.* **718** *Quam,* **720** *Angustoque...a fin. eius*: comp. II 87 *durissima quae sint...neque quicquam a tergo ibus obstet*; IV 962 *Et quo...studio...Aut quibus in rebus...Atque in ea ratione*: this change from the relat. to the demonstr. pron. is not unusual in Latin, though more common in Greek: [it is common in Livy; see Kuehnast p. 58 59.] So Cic. orator 9 *quam intuens in eaque defixus*, and Brutus 258 *omnes tum fere qui nec extra urbem hanc vixerant nec eos aliqua barbaria domestica infuscaverat*: in many cases, perhaps in these passages of Cicero, the relat. could not be repeated: comp. Madv. de fin. I 42 *quod ipsum nullam ad aliam rem, ad id autem res referuntur omnes*: Madvig opusc. II p. 177 and Conington to Virg. geor. II 208 and Aen. VI 101 give other examples of clauses appended to relative ones in divers ways: comp. 154 *Quorum operum...ac fieri* cet.; 684 *quorum...686 mutatoque* cet.; 848 foll. *simili quae praedita constant Natura...neque ab exitio res ulla refrenat*; II 140 *in solis quae lumine cernere quimus Nec quibus id faciant plagis apparet aperte*; V 895 *Quae neque florescunt...neque sunt eadem iucunda*: the simpler cases such as those quoted by Conington l. l. where the succeeding clauses are 'in material, but not in formal connexion' with the relative clause, are exceedingly numerous in Lucr.: comp. 21 foll. 58 foll.: as indeed in all writers, the Latin idiom making them not easy to avoid: [so auct. bell. Afr. 64 1 *quem Caesar.. dimiserat et postea se ad Pompeium contulerat*:] much harsher is Livy X 26 6 *sunt, quibus ne haec quidem certamina exponere satis fuerit, adiecerint* cet. *Ang. fretu* seems governed by *rapidum*, the sea is rendered rapid by the narrowness of the channel: Livy XXVIII 30 6 *deprensam rapido in freto*, of the straits of Gibraltar. *fretu*: Gell. XIII 21 15 quotes Cic. Verr. V 169 *perangusto fretu divisa* of this same strait: Charisius I, p. 129 7 Keil,

quotes from Messalla *angustiae fretus*, from Cicero *a Gaditano fretu*, from Augustus to Antonius *fretu cessi*: Cic. pro Sestio 18 Halm restores *fretu* from P 1: Lucr. VI 364 has *fretus* nom. **722** *vasta Char.* is found in Catullus and Virgil: *vasta* implies that in which nothing lives. *minantur...se coll.*: Plaut. asin. 604 *ab hac minatur sese abire*; Pseud. 776 *Interminatust leno.. Eum cras cruciatu maximo perbitere*: [see Ussing to asin. 439 597 and 604:] this use of the pres. infin. for the fut. is found after many similar verbs, such as *promitto, dico, nego, testor, decerno*, see Wagner Ter. index s. v. Infinitive: *censeo*, see Drakenb. Livy II 5 1: *spero*, etc. as auctor ad Heren. II 28 *sperabat illius morte se salutem sibi comparare*; Ter. eun. 520 *sperat se a me avellere*; Caes. ap. Cic. ad Att. IX 13 A, *cum in spem venero...aliquid me conficere*: the idiom occurs even in Cicero, as ad Att. I 1 1 *eo ipso tempore quo tuum puerum...proficisci Cincius dicebat.* **723** foll. observe *rursum, iterum, rursum.* **724** *Faucibus*: VI 701 *crateres, ut ipsi Nominitant; nos quod fauces perhibemus et ora.* *eruptos ignes*: so V 598 *erumpere lumen*; VI 583 *erumpitur*; Cic. Arat. 111 *erumpit flatibus ignes*; ad Att. XVI 3 1 *ne in me stomachum erumpant*; [Caes. b. civ. II 141 *portis se foras erumpunt*: see here Kramer (Hofmann).] So Lucr. IV 1115 *se erupit*: *prorumpitur* is also found in Lucr. *iterum* 'anew' 'once more', without any reference to the number of previous eruptions.

726 the constr. is *quae, magna, videtur multis modis miranda.* *cum... tamen videtur*: see n. to 566. **727** *visenda* used in this sense by Cic. Verr. IV 132 and 135. **728** Wak. cites Aen. I 271 *Longam multa vi muniet Albam*; but the sense differs: *munita* is here metaphorical.

730 *carum* means 'precious,' τίμιον: comp. Livy XXXV 21 16 *omnia quae hominibus sancta caraque sint*; XXI 60 9 *omnibus fere caris rebus...citra Pyrenaeum relictis*; XXII 42 6 *omnia cara in promptu relicta*; Sall. Iug. 100 3 *perfugae minime cari*; Nepos VII 11 6 *ut, apud quoscumque esset, princeps poneretur habereturque carissimus*; [Caes. b. c. III 59 3 *ni propter virtutem non solum apud Caesarem in honore erant, sed etiam apud exercitum cari habebantur*; b. Alex. 60 *nobilissimae carissimaeque possessiones Cordubensium*; b. Afr. 91 2 *quo.. omnem pecuniam carissimasque res comportaverat*; b. Gall. V 33 6 *quae quisque eorum carissima haberet.*] **731** *pectoris* the seat of the heart and intellect, and therefore of poetical genius: see n. to 413. With the rhythm of the v. comp. Catul. 64 383 *Carmina divino cecinerunt pectore Parcae.* **732** it is not easy to say whether *vociferantur* is neut. as II 1050 *res ipsaque per se Vociferatur*; or act. as III 14 *ratio tua coepit vociferari Naturam rerum*: both constr. are found in Cicero too. **733** Lucr. may have been thinking of what Empedocles says of himself 392 ἐγὼ δ' ὔμμιν θεὸς ἄμβροτος οὐκέτι θνητὸς πωλεῦμαι μετὰ πᾶσι τετιμένος, ὥσπερ ἔοικε. He no doubt looked upon Empedocles' poem περὶ φύσεως as in some sense his poetical model, and therefore thought he owed him a debt of gratitude. With many differences there were also many points of resemblance between their two systems; this especially that the first-beginnings of each were imperishable, and that life and death were but the passing to and fro of elements into things, and things into elements. All this being considered, we may grant that his lofty panegyric is justified by the large fragments we possess of Empedocles' chief poem, nearly 400 out of 2000 verses: yet the *vociferantur* cet. stands in striking contrast to Aristotle's ἃ ψελλίζεται λέγων Ἐμπεδοκλῆς: but that stern judge is referring to the imperfect utterance of the first philosophy yet in its infancy, as may be seen a few pages later in the last chap. of metaph. I; and we learn from Diog. Laert. VIII 57 that Aristotle recognised his poetical genius, ἐν δὲ τῷ περὶ ποιητῶν φησιν ὅτι καὶ Ὁμηρικὸς ὁ Ἐμπεδοκλῆς καὶ δεινὸς περὶ τὴν φράσιν γέγονε, μεταφορικός τ' ὢν καὶ τοῖς ἄλλοις τοῖς περὶ ποιητικὴν ἐπιτεύγμασι χρώμενος.

734—762: he and the others have given responses truer than those of Phoebus; yet all alike have gone to wreck on the first-beginnings of things: they deny a void in things, yet give them motion and leave them soft and rare; and they set no limit to the division of things: if first-beginnings are soft, they were born and will die; all things therefore have come from and will return to nothing: again such elements are hostile one to the other; and thus, like lightning clouds winds, will be apt to fly asunder one from the other rather than combine. **734** *tamen*, is repeated in 740. *supra*, 705 foll.: *quos diximus*, Thales Pherecydes Anaximenes, Diogenes of Apollonia, Hippasus Xenophanes Oenopides, Hippo of Rhegium, Onomacritus, Idaeus of Himera, Archelaus and the rest. **735** *egregie* from its place seems to go with *multis*: IV 342 *multis partibus hic est Mobilior multisque minutior*; Caes. de bel. civ. III 84 *numero multis partibus esset inferior*: *mul. part.* is used with the same force by Caesar ibid. 80; Caelius ap. Cic. ad fam. VIII 9 3; Cicero himself ad fam. I 2 2, de fin. III 36; Suet. I 68: Cicero uses *omnibus partibus* with much the same force, which *egregie multis* has here; see Madv. de fin. II 108. **737** *adyto cordis* of course with reference to the illustration which follows: Ov. met. XV 145 *augustae reserabo oracula mentis.* **738** Lucr. was prob. thinking of Callim. in Del. 94 where Apollo says Ἀλλ' ἔμπης ἐρέω τι τορώτερον ἢ ἀπὸ δάφνης. **739** Aristoph. Plut. 39 τί δῆτα. Φοῖβος ἔλακεν ἐκ τῶν στεμμάτων, taken with Eur. Or. 321 τρίποδος ἄπο φάτιν, ἃν ὁ Φοῖβος ἔλακεν ἔλακε and Iph. Taur. 951 Ἐντεῦθεν αὐδὴν τρίποδος ἐκ χρυσοῦ λακών, exactly expresses the v. of Lucr. who translates the oracular ἔλακεν by *profatur*. '*tripodas laurosque sequi* Stat. Theb. VII 707; Ammian XXIX I 28 sqq.' J. E. M. The Pythia, when seated on the tripod appears to have been surrounded with garlands of the bay-laurel; the smell of which was supposed to increase the prophetic afflatus, excited by the cold air which came out of the deep cleft: they are the στέμματα of Aristophanes, the δάφνη of Callimachus, the

laurus of Lucr.: to them Pind. ol. VII 32 alludes in *εὐώδεος ἐξ ἀδύτου*. Hom. hymn. Apoll. Pyth. 215 *Χρείων ἐκ δάφνης γυάλων ὕπο Παρνησοῖο.* There is much uncertainty with regard to the details of the Delphic tripod, as may be seen in Wieseler's very diffuse dissertation upon it. **738 739** recur V 111 112: with the abl. *tripodi* Lach. compares II 416 *Cilici*, III 132 *Heliconi*. **740** *fec. ruinas*: metaphor from a building or other heavy body falling; perhaps from a carriage breaking down; Horace has the same expression: Lucr. uses more than once the more common *dare ruinas*: see n. to IV 41 *discessum dederint*: Cic. de fin. I 18 applies the same metaphor to Epicurus himself, *illae Epicuri propriae ruinae*; and II 18 *ruit in dicendo*. **741** after Homer's *κεῖτο μέγας μεγαλωστί*, which Virgil and Ovid imitate in various ways, *gravis graviterque ad terram concidit*, *ingentem atque ingenti vulnere victum*, *magnum magno conamine* and the like: Lucr. himself IV 902 *magnum magno molimine navem*. *ibi* is here very emphatic, and therefore its unusual position gives it additional force.

742 *motus* cet. the impossibility of which without void he has proved at such length above 335—397: Empedocles 63 thus denies void, *Οὐδέ τι τοῦ παντὸς κενεὸν πέλει οὐδὲ περισσόν*: comp. too Arist. de gen. et corr. I 8 where he elaborately criticises Empedocles' doctrine of *πόροι* and of the motions and unions of things by means of these without void; and shews that his *πόροι* must really mean much the same as the *κενόν* of Leucippus, though Empedocles maintains a *πλῆρες*: he concludes that this system of *πόροι* is *ἢ ψεῦδος ἢ μάταιον*. **745** *admiscent in corpus*: Pliny nat. hist. XXVI 104 has same constr. **747** *pausam*, a word occurring six times in Lucr.; found also in Plautus Ennius Accius, and again brought into use by Gellius Apuleius and other imitators of the older writers. *fragori*: Lucr. almost alone appears to use this word in its literal sense, here and V 109 317; and perhaps in the two last places the meaning is transitional: yet Sen. Herc. Oet. 121 *Nos non flamma rapax, non fragor obruit.* **748** *nec prorsum* = et prorsum non, omnino non: comp. 1005 *Nec prorsum facere*; III 45 *Nec prosum quicquam nostrae rationis egere*; 1087 *Nec prorsum...demimus hilum Tempore de mortis*; Cic. de fin. II 17 *non prorsus, inquit*; de nat. deor. III 21 *nullo modo prorsus adsentior*; [Lael. 57 *nulli prorsus adsentior*: see Mueller (Seyffert) p. 213:] Plaut. trin. 129 *nullo modo Potest fieri prosus*; most. 307 *Qui invident, numquam eorum quisquam invideat prosus commodis*; asin. 236 *Nec quemquam interea alium admittat prosus*; Ter. Andr. 435 *nihil prorsus*; heaut. 894 *nihil prorsum*; but 776 *prorsum nihil*, in same sense: the antiquarian Apuleius has many instances: met. III 14; IV 23; 30; X 10; 15; 23. Cic. acad. post. 27 speaking of peripatetics and academics will illustrate Lucr. *eaque etiam interire, non in nihilum, sed in suas partes quae infinite secari ac dividi possint, cum sit nihil omnino in rerum natura minimum quod dividi nequeat*: here is asserted of them exactly what Lucr. objects to, the *cum sit nihil om. in rer. nat. minimum* seeming a prose translation of 748; yet at the same time is denied the inference that they pass away *in nihilum*, which Lucr. below 756 maintains must follow. Empedocles himself 77 and 81 strenuously denies the same, *φύσις οὐδενός ἐστιν ἁπάντων Θνητῶν οὐδέ τις οὐλομένου θανάτοιο τελευτή κ.τ.λ.* and *ἔκ τε μὴ ὄντος ἀμήχανόν ἐστι γενέσθαι Τό τ' ἐὸν ἐξόλλυσθαι ἀνήνυστον καὶ ἄπρηκτον*: Lucr. therefore here as elsewhere is refuting them from his own point of view. **749**: see the full explanation of this passage in n. to 599. **750** *ad sensus nostros* appears to be used simply for the dative: comp. IV 1062 *obversatur ad auris*; Prop. I 18 29 *quodcumque meae possunt narrare querellae, Cogor ad argutas dicere solus aves*; Catul. 61 215 *Dulce rideat ad patrem*; Cic. ad Att. VIII 3 6 *invidiosum ad bonos*: thus we find, espec. in the older writers, *dare ad*, *promittere ad*, *restituere ad*, etc. [Comp. too III 830 *Nil igitur mors est ad nos* and n. there.] **751** *quae cernere non quis* are of course the atoms; as 600 *Corporis ill. q. n. cernere sensus Iam nequeunt.* **754** *quae* nos *nativa vid. Esse et mortali cum c.*: yes but Empedocles saw them to be as immortal as the atoms of Epicurus: comp. 178 *Αἶψα δὲ θνήτ' ἐφύοντο τὰ πρὶν μάθον ἀθάνατ' εἶναι*: they are *θνητά* when in things, *ἀθάνατα* by themselves. **755** *Esse et mort. cum corp.* with same force as simple abl.: so 347 *esse...raro cum corpore*; 774 *non exanimo cum corpore*; V 352 *quia sunt solido cum corpore*; 364 *solido cum corpore mundi Naturast*; 904 *triplici cum corpore*; VI 439 *lento cum corpore nubem*; 631 *raro cum corpore tellus Est*; 1059 *raro quia sunt cum corpore*: III 201 *quaecumque magis cum pondere magno Asperaque inveniuntur*, *cum* has the same force; and IV 1126 *grandes viridi cum luce zmaragdi*; V 864 *canum fido cum pectore corda*; VI 5 *virum tali cum corde repertum*; 75 *placido cum pectore adibis*. *utqui* of mss. is to be retained here, and in II 17, and is to be read in II 428 and III 738, as shewn by N. P. Howard in Journ. of philol. I p. 118—121: in my last edition I had already given *ut qui* in III 738, and had intended to give it in the last two places, before I received Mr Howard's letter. But he is right I think in attaching the *qui* enclitically to *ut*: the *qui* is an affirmative particle and has the same force as in *atqui*: 'yes that' or the like: see espec. Fleckeisen krit. Miscellen p. 23—33, who shews from Plautus that *qui* often has this force in *hercle qui*, *edepol qui*, *ecastor qui*, *at pol qui*: and in *quippe qui*, in places where *qui* cannot be a relative: and in *utqui* (*ut qui* he writes it), from the same passages of Plautus that Mr Howard has cited; such as trin. 637 *An id est sapere, utqui beneficium a benevolente repudies*; capt. 553; asin. 505. It is probable that this *qui* lurks in other corrupt passages: thus in the letter of Balbus, an unpolished writer, Cic. ad Att. VIII 15 A 2, I unhesitatingly propose *nam illum tanti facio*, utqui [*qui* mss. *ut* Lamb. etc.] *non Caesarem magis diligam*; which would resemble Plaut. Bacch. 283

Adeon me fuisse fungum, utqui illi crederem. This *qui* prob. soon became obsolete, except in *atqui*. [Comp. also Cic. de nat. deor. II 143 Swainson, and the first sentence of his epistles, *tanta enim magnitudo est tuorum erga me meritorum utqui* (so mss.), *ut tu nisi perfecta re de me non conquiesti, ego...putem*: here *ut* = quoniam, quia, as V 3 1 *et, ut sunt leves ab eiusmodi homine, a me despiciuntur*; XIII 69 2 *etsi ut eius modestiam cognovi, gravis tibi nulla in re erit*; 8 3 *ut ego illi uni plurimum debeo*; XVI 6 2 *ut ego euntem Patras neminem praetermitto*; Virg. Aen. XII 488 *Huic Messapus, uti laeva duo forte gerebat Lenta* cet.; *Hasta volans, ut forte...constiterant.*] **756** see n. to 748: **756** and **757** are almost a rep. of 673 674. **758** *iam* belongs to *habebis*: comp. 649, and see n. to VI 176. *habebis*: III 831 *mortalis habetur*; Virg. ecl. II 2 *nec quid speraret habebat*; Ter. Andr. 498 *Teneo quid erret et quid agam habeo*: this sense is common in Cicero, as ad Att. I 12 4 *quid praeterea ad te scribam non habeo.* **759—762**: see n. to 701—704, and 984 (998) foll.: he here too concludes a discussion with a short argument addressed to the common sense or the eyesight of his readers. **759** *veneno*: Wak. and Lach. quote Varro de re rust. I 2 18 *quaedam enim pecudes culturae sunt inimicae ac veneno.* **761** *coacta* seems to have somewhat the same sense here, as VI 274 *cogit*, 464 *cogunt*, 718 *cogentes*, 511 *Copia nimborum turba maiore coacta*; but I know no exact parallel. **762** *fulm. imbr. vent.* representing three of the four elements.

763—781: things too might just as well be their elements, since things by turns come from them and pass into them: but if you say that these elements remain unchanged in things, then nothing can be produced from them, since in everything they will shew their own several natures: first-beginnings must have no properties that sense can apprehend. **766** i.e. res. ill. prim. dici retroque p. **767** *Alt. gign.*: the ever-recurring *μίξις τε διάλλαξίς τε μιγέντων.* **769** *ab*: see n. to 554. **771** *rorem liq.*: see n. to 496. **774** *Non an.* res, *non* res *ex. c. cor.*: only here and in III 573 he uses *animans* in the nomin. and as an adj. [*non ex. c. cor.* might perhaps be compared with Livy III 57 9 *non iuniores modo sed emeritis etiam stipendiis...praesto fuere*; XXI 62 5 *multis locis hominum specie procul candida veste visos.*] **775** foll. much resemble his criticism of Anaxagoras below 880—896, and II 915 foll. **778—781** are fully explained II 730—885, where it is shewn that atoms have no sensible properties. **778** *oportet* is perhaps a *μείωσις*, as *difficile est, haut facile est*, etc.: see n. to III 361; and Livy VII 35 6 *sopitum oportet fallatis, immo necesse est.* **779** *cland. caec.* are joined II 128 *motus . . clandestinos caecosque.* **781** *proprie esse* is to exist by itself with its own peculiar properties and functions undisturbed by anything alien: VI 985 *quisque* [sensus] *suam proprie rem percipit in se.*

782—802: again they suppose these elements to pass into each other in this ceaseless round, fire air water earth water air fire: but first-beginnings cannot thus change; they must be eternal, and of such a nature that when some go away, others join, and the rest change their order, those which made fire may now make air or anything else.—It is possible enough that Lucr. viewing Heraclitus through the glosses of the stoics, may have been thinking among other theories of his *ὁδὸς ἄνω κάτω*: but no one will now attribute to the Ephesian this interchange of the *four* elements: by the vague 'they' Lucr no doubt points mainly at the stoics; whose champion says in Cic. de nat. deor. II 84 *cum quattuor sint genera corporum, vicissitudine eorum mundi continuata natura est. nam ex terra aqua, ex aqua oritur aer, ex aere aether; deinde retrorsum vicissim ex aethere aer, inde aqua, ex aqua terra infima. sic naturis iis, ex quibus omnia constant, sursus deorsus ultro citro commeantibus mundi partium coniunctio continetur*: and comp. ib. III 31. Martian. Cap. VII 738 p. 592 Kopp *ex informi materie* (their *ἄποιος ὕλη*) *primus ignis, ex igni aer, ex aere aqua, ex aqua terra; item fit adscensio et ex terra aqua est, ex aqua aer, ex aere ignis, ex igni in* cet.: with 787 788 too comp. Emped. 122: for him also Lucr. must partially include: *ἀλλ' αὔτ' ἔστιν ταῦτα δι' ἀλλήλων δὲ θέοντα Γίγνεται ἄλλοθεν ἄλλα διηνεκὲς αἰὲν ὁμοῖα*: which are repeated with some difference 136 137. **782** *repetunt a*: thus used without an object by the auctor ad Heren. I 15 *ne ab ultimo repetamus*; Cic. pro Archia 1 *inde usque repetens*; de orat. I 91 *cum repeteret usque a Corace nescio quo et Tisia*; Aen. I 372 *si prima repetens ab origine pergam.* **783** *auras Aeris*: 801 *aeris auras*: see n. to 207. **784** *imbrem . . imbri*: see n. to 715. **787** *inter se mutare*: comp. VI 456 *haec comprendunt inter se*: this is the regular Latin idiom: thus Cicero has *inter se amare, colere, diligere, vereri, consalutare, adspicere*; and similarly Plautus, Caesar, Nepos, Livy, Tacitus, etc. [Caesar has several times *inter se cohortati.*] **788** *sidera mundi*, imitated by Virgil who has also *astra mundi, lumina mundi*: *mundi* here, as often in Lucr. and others, = caeli: Catul. 64 206 *concussitque micantia sidera mundus.* **790 791** the same in meaning as 672 673, though the expression is varied; while 792 793 are exactly repeated from 670 671, where see note. **794** *quae* i.e. the so-called four elements. **795** *In comm. ven.* seems to resemble the very common phrases *venire in discrimen, periculum, odium, contemptionem, consuetudinem* and the like: *commutatum*, a *ἅπαξ λεγόμ.* = commutationem: see n. to 653. **796** *ea* the four elements: *ex aliis quae* etc. such other *primordia* as cannot change. **797** *tibi*: Lucr. is fond of this dativus ethicus as they call it: this very line occurs four times: comp. also 733 *Nulla tibi ex illis poterit res esse creata*; 918 *tibi pereunt primordia rerum*; II 500 *Iam tibi* cet.; 1038 *Quam tibi iam nemo* cet.; III 197 *ut ab summo tibi diffluat altus acervus*; 279 *Sic tibi nominis* cet.; IV 511

Illa tibi est igitur; 875 *tibi anhela sitis*; v 260 *terra tibi libatur*; 294 *nocturna tibi*; 805 *Tum tibi terra dedit*; 1209 *Nequae forte deum nobis* cet.; III 992 *Tityos nobis hic est.* **798** *Quin potius.. constituas?* most writers would here prefer the indic.; but comp. Plaut. epid. III 4 19 *Quin tu alium quaeras cui centones sarcias?* Cic. de rep. VI 14 (somn. Scip. III) *quin tu aspicias ad te venientem Paulum patrem?*—so all mss., rightly, I think; but Halm reads *aspicis*. That his atoms do thus work he will abundantly shew in the second book; and indeed it is reiterated in the next paragraphs 817—829, 902—920. **802** *sic*=et sic, and couples this line with what precedes.

803—829: but, you will say, all these four elements are necessary for the production of things: true; and without meat and drink life cannot continue: the reason is the same in both cases: many first-beginnings are common to many things; and the same by various mixtures motions and the like may produce the most different things; just as the same letters go to quite different words. **803** foll. you see the earth out of which, the air into which all things grow; the rain and sun by which they grow. **805** *indulget* gives full play to: so Virgil *indulge ordinibus*, *hospitio*; and Livy *indulgere ardori militum*. **806** *tabe nimborum* appears to have much the force of VI 521 *nimbi rigantes*: the *nimbi* melt into water: comp. the metaph. VI 514—516: but perhaps it is better to make *tabe* refer to the trees: the force of the *nimbi* seems to make them dissolve into water; comp. Aen. I 173 *sale tabentis artus*: III 19 the *nimbi* are the actual rain-storms shed from the *nubila*. *tabē*: this line is quoted by Priscian inst. VII 72 for the *ē* of *tabe*: comp. III 734 *contagē*: C. F. W. Mueller Plaut. pros. p. 15—18 throws great doubt on *ē* of the abl. of the 3rd decl. in Plautus. **808** *possint* is potential: so II 989 *queant*; v 210 *si non cimus, nequeant*; 768 *si fulget..., cur nequeat*; II 922 *Scilicet ut nequeant*, where Lach. after Bentl. reads *nequeunt*. *animantis*: this is one of 14 cases in which *-is* has been retained by me in the nom. plur. after Lach. on the authority of both A and B: the other cases occur in II 577, 955, 1155, IV 452, 1203, 1221, v 216, 494, 524, 525, 1072, VI 221, 936: see Lach. p. 56 and introduction vol. I p. 36: among these 14 examples we find indifferently participles adjectives and substantives: and this quite agrees with all other testimony on the subject. **809** here begins the poet's answer: yes, and meat and drink feed the body; yet the body's first-beginnings are not meat and drink. *cibus aridus*, as 864: *tener umor* occurs in Virg. geor. II 331. **813** *certis*: see n. to 521. *ab* joined with things is not uncommon in Lucr.: III 323, 429, 522, 567, v 258. **813—816** notice *res* 5 times repeated in three vss. and the antithetical and alliterative form of the whole sentence; and comp. 893—897 where *res* likewise occurs 5 times: also 690 691 *res, rem, rerum*; IV 42 43 *rerum, rebus, rerum*, and many such like: assonances and alliterations of all kinds seem to possess for Lucr. an irresistible attraction: such repetitions of *res* are common in Cicero and Caesar. [Comp. Plaut. Epid. 113 *Is est amicus qui in re dubia re iuvat ubi rest opus.*] *ratio* is nearly as great a favourite as *res*: I 128—130 *ratio, ratione, ratione*, and in different senses. *corpus, corpora* too are used with like frequency: see also note to 875, where however the instances are to our taste more faulty. **814** foll. give his own doctrine so often repeated. **817** foll. repeated with slight change 908 foll. and II 760 foll. **819** *dent motus* here and in the four repetitions means, impart motion to others; II 311 *dat motus* is 'moves itself': comp. *dare ruinam* and the like, and n. to IV 41. **823** foll. this illustration occurs several times in the poem, as 197 and 912 foll.: the 24 letters of the alphabet can form an enormous number of permutations; how many more then these *primordia*, the different shapes of which are so many times more numerous than those letters, while the number of atoms of each shape is infinite, as shewn in the 2nd book? Arist. de gen. et corr. I 2 in illustrating precisely the same doctrine of Democritus and Leucippus, adds p. 315 b 14 ἐκ τῶν αὐτῶν γὰρ τραγῳδία καὶ κωμῳδία γραμμάτων. **826** *sonitu sonanti*, a mere poetical assonance, like *anxius angor, penitus penetrari, fera ferri, apparet aperte, domi domitos, semine seminioque, fera saecla ferarum, misero misere, Nec validas valeant*: comp. Aen. II 53 *cavae cavernae*.

830—874: the homoeomeria of Anaxagoras is equally erroneous: all simple substances he supposes to consist of infinitely small particles of the same nature as the thing: bone of minute bones, gold of grains of gold, earth of little earths, and so on: he denies too void and any limit to the division of things, like those above mentioned: such first-beginnings as these cannot resist destruction; so that things would return to nothing. Again, as food increases the body, the parts of the body are formed of things different in kind: or if you say all food has particles like the parts of the body contained in it, then meat and drink consist of particles different in kind: the same dilemma will apply to what grows out of the earth, to flame latent in wood, and the like.—That Lucr. had much sympathy with Anaxagoras will be seen at II 991 foll. where he translates from Euripides and adapts to his own purpose a passage founded upon Anaxagoras' system. There were also other points of contact: Anaxagoras held, as did Epicurus, that the sum of matter in the universe was always the same, and that nothing could pass into nothing. Though Lucr. 847 foll. tries to shew that Anaxagoras' principles lead to a different conclusion, he says, frag. 22 Schaub. (17 Schorn), in words that Epicurus might have adopted, τὸ γίνεσθαι καὶ ἀπόλλυσθαι οὐκ ὀρθῶς νομίζουσιν οἱ Ἕλληνες· οὐδὲν γὰρ χρῆμα γίνεται οὐδ' ἀπόλλυται, ἀλλ' ἀπ' ἐόντων χρημάτων συμμίσγεταί τε καὶ ἀποκρίνεται. The many points of difference Lucr. himself clearly shews: see also the editor's note 21 to Archer Butler's lectures on ancient philos. I p. 322. His refutation of

Anaxagoras much resembles even in language his argument against Empedocles; though Aristotle from his different point of view is fond of contrasting the two. **832** *patr. serm. eg.*: see above p. 11: and n. to 139: these words are quoted by Pliny epist. IV 18.

834 *homoeomerian*: the word is not found in the few extant fragments of Anaxagoras, but Lucr. distinctly here states that he did use it; as well as Plut. de plac. phil. I 3, ὁμοιομερείας αὐτὰς ἐκάλεσε, and Simplicius to whom we owe so many of the scanty fragments. Lucr. seems to denote by the term the relation which existed between the things in being and the particles like in kind, of which they were composed; ἄπειρα, as Anaxagoras says in frag. 1, καὶ πλῆθος καὶ σμικρότητα: these he himself names σπέρματα or χρήματα, Aristotle τὰ ὁμοιομερῆ στοιχεῖα, ἀόρατα ὁμοιομερῆ, and the like: the later Greeks call them ὁμοιομερεῖαι in the plur. probably from some misconception. Often as Aristotle uses the adjective, he never employs the substantive, and Lucr. was hitherto the oldest authority for the latter; but now I am glad to say I can trace it back to Epicurus: see frag. 6 of the 28th book of the περὶ φύσεως, Gomperz Zeitschr. f. Oesterr. Gymn. vol. 18 p. 212, τό γε [στοιχεῖον] ἤδη τὴν ὁμοιομέρειαν τῷ φαινομένῳ κεκτημένον. Epic. here, as Gomperz explains, seems to be combating the Timaeus of Plato; but he uses it exactly in the sense I had supposed Lucr. and Anaxag. to have used it, 'the element possessing similarity of parts with the thing in being'. As he and his school were so well acquainted with Anaxagoras, I do not doubt that he got the word from the latter's writings, and that Lucr. had it from them and from Epic.; though Schleiermacher, Zeller and many other Germans refuse the term to Anaxagoras himself. **835** foll. most of the examples here given are found in Aristotle Simplicius and others, so that they were doubtless employed by Anaxagoras himself; but to shew the difficulty of knowing in the absence of their writings what these early philosophers taught, while Lucr. includes, as we might expect, earth and fire among the simple bodies formed of their ὁμοιομερῆ, Aristotle more than once distinctly states that, while bone, flesh, etc. were simple, earth and fire were σύνθετα and mixed acc. to Anaxag. in contrast to Empedocles with whom of course they were elements; and again in metaph. I 3, unless you are to force his words, as Bonitz does, he flatly contradicts himself and agrees with Lucr. Again we have no evidence to shew how Anaxag. supposed these mixed bodies to be formed, and Lucr. seems in what follows to feel perplexed; or how he conceived organised things, such as the bodily organs, to be formed, which Arist. de caelo III 4, p. 302 b 24, distinctly states he did not form of ὁμοιομερῆ. **835 836** *pauxillis, minutis*, to express what Anaxagoras taught were infinite in smallness. **837, 853, 860** *sanguen* is found thrice in Ennius, twice in Accius, and in Petron. 59. **837** *viscus, viscera*, occur very often in Lucr. and always I believe denote the whole of the flesh and soft substance between the skin and bones: *viscus, visceris*, and twice *viscere* are found in Lucr. **839** *auri*: see notes 1: not only Simplicius there cited, but also Philoponus and Laertius use this illustration: which no doubt comes from Anaxagoras himself. **841** *Ignibus ex*: II 731 *albis ex alba*, 791 *sed variis ex*, III 375, 839, 858 and V 949 *quibus e*; VI 788 *terris ex omnia surgunt*; IV 804 *siquae ad*: as Cic. de nat. II 10 *quos ad*: 597 *Haec loca per*; V 770 *loca . . inimica per exit*; 1264 *viam per*: VI 747 *Cumas aput*, 940 *Qua de* are more usual. Lucr. is fond of this order, adj. prepos. and then a word intervening between it and the subst.: III 10 *tuisque ex, inclute, chartis*; IV 829 *validis ex apta lacertis*: with these comp. Virg. ecl. VI 19 *ipsis ex vincula sertis*: VI 714 *medium per saepe calorem*; 855 *supera de reddere parte*; 1202 *capitis cum saepe dolore*; IV 472 *sua in statuit vestigia*; III 421 *uno sub iungas nomine*; V 869 *suo sine pabula parta labore*: comp. too Ov. trist. IV 4 74; ex Ponto I 2 150; IV 10 2; 14 15; German. 373: VI 1160 *noctem per saepe diemque* is of the same nature. **843** *ulla parte, parte ulla, multis partibus* and the like are common in Livy and others without any preposition, as well as with: why refuse the same liberty to Lucr.? Livy X 14 10 *ubi nulla ex parte hostem loco moveri vidit*; 16 *nec parte ulla pelli aut perrumpi potuit*. **844** so he himself in terms repugnant to an epicurean, frag. 5 (15) οὔτε τοῦ σμικροῦ γέ ἐστι τό γε ἐλάχιστον, ἀλλ' ἔλασσον αἰεί. τὸ γὰρ ἐὸν οὐκ ἔστι τομῇ οὐκ εἶναι κ.τ.λ.: τομῇ Zeller for τὸ μή. **846** *illi*, Empedocles and the rest: see 734 foll. **848** *Si prim. sunt, sim.* etc.: Anaxagoras gives to his particles, frag. 3 Schorn, χροιὰς καὶ ἡδονάς, colour and taste; while Lucr. in II takes such pains to prove that his atoms can have no secondary qualities: again frag. 16 Anaxagoras says that as there can be no minimum, his particles cannot exist alone, ἀλλ' ὅκως περὶ ἀρχήν, καὶ νῦν πάντα ὁμοῦ: to Lucr. an absurdity, who will only reason from his own premisses. **850** *neque* [eas] *refrenat*: see n. to 718. **851** *oppressu* may be added to the words enumerated in n. to 653. **852** *sub dent.*: *faucibus* is a more common metaphor: Lamb. quotes Arnob. II 32 *non esse animas longe ab hiatibus mortis et faucibus constitutas*; but Lucr. agrees better with our use of 'jaws of death': join 'in oppressu valido sub ipsis leti dentibus'. **859—866** a dilemma: food supports the body: are the particles ὁμοιομερῆ with the food? then veins, blood etc. consist of what is not ὁμοιομερές with it: or if you say that every kind of food has in it whatever the body has, bone vein blood, then will meat and drink consist of particles not ὁμοιομερῆ with them: again the poet's own premisses assumed. Plut. de plac. phil. I 3 proves what effective use Anaxagoras must have made of the fact of food nourishing at once all the parts of the body, so different from each other and from the food itself. **863** *omnino*, to complete the list, go through all the parts specified. **864** *cibus om.* including all nourishment, drink as well as meat, *et aridus cibus et liquor*: *ipse* means 'as well as dry

food'; it=etiam. **865** *alienigenis* is the opposite to ὁμοιομερής. **866** *sanie*: Celsus v 26 20 *est enim quaedam sanies quae vel* ἰχώρ, *vel* μελίκηρα *nominatur*: ἰχώρ is a hippocratean word and is often used by Aristotle for the serous part of blood, as here by Celsus: now comp. Arist. part. anim. I 1, p. 487 a 1, ἔστι δὲ τῶν ὁμοιομερῶν τὰ μέν . . τὰ δέ . . ὑγρὰ μὲν οἷον αἷμα ἰχώρ . . ξηρὰ δὲ καὶ στερεὰ οἷον νεῦρον . . ὀστοῦν etc.: here we have the *ossibus, nervis, sanie, sanguine* of Lucr. enumerated: comp. too Heraclit. letters 5, p. 50 l. 27 Bern., ὃ δοκεῖ τοῖς ἄλλοις ζῆν ἐν φλέγμασι καὶ χολῇ καὶ ἰχῶρι καὶ αἵματι, νευροῖς καὶ ὀστοῖς καὶ σάρκεσι πεπιλημένον. **867—874** a similar dilemma, which the lost vss. render obscure: trees and the like grow out of the earth; therefore the earth consists not of ὁμοιομερῆ, but of minute trees and the like: flame smoke ash are latent in wood; therefore wood consists of minute flames etc. not of ὁμοιομερῆ: again trees when above ground are fed out of the earth: if the earth consists of ὁμοιομερῆ, then trees are fed and increased by things not ὁμοιομερῆ; and similarly of the flames which are seen to be fed by wood. **870** *Transfer*: Cic. de off. I 51 *quod ab Ennio positum in una re transferri in multas potest*; Sen. epist. 65 3 *quod de universo dicebam, ad haec transfer*.

875—896: Anaxagoras tries to extricate himself by assuming that everything is latent in everything; but that that only is perceived, of which the like particles are most numerous and most prominent: a manifest fallacy; for then corn, grass, water, clods, wood would shew when reduced to small fractions traces of blood, milk, fire, etc. i.e. portions of things fed by or produced from them respectively: the truth is that the seeds of things have no qualities like to those of things in being. **875** *latit.*: comp. Cic. de fin. II 107 *si tuam dicerem, latebram haberes*; [Sen. rhet. controv. praefat. I 1 21 *ipsa enim actio multas latebras habet.*] Notice *latitandi* and 877 *latitare* in two different senses with nothing in common. Lucr. like the old Latin writers generally, loves as we have said assonance alliteration antithesis and the like so dearly, that often the use of a word seems to suggest to him a repetition of it, without any point whatever, and therefore to our taste faulty: see n. to 813—816; and comp. 893 *docet res, Scire licet non esse in rebus* cet.; 976 *exempta fine* with 978 *finique locet se* and 979 *non est a fine profectum*; 975 *effugium praecludit* with 983 *Effugium...prolatet*; II 714 *caecis Corporibus fugiunt e corpore*; 1018 *discrepitant res*: *Sic ipsis in rebus*; III 364 *Lumina luminibus*; 379 *Corpora . . in corpore*; 451 *validis quassatum est viribus aevi Corpus et obtusis ceciderunt viribus artus*; VI 718 *Cogentes sursus replent coguntque manere* and the like. **879** almost repeated IV 97 *In promptu quoniam est in prima fronte locata*: in both cases *in promptu* is not connected with *locata*: comp. the other examples of its use in Lucr. Cicero etc. **875—879** this which Lucr. declares to be a sorry subterfuge, was in fact the very corner-stone of Anaxagoras'

physics. His particles were infinite in number and smallness; from the necessity of the case everything was mixed with everything, except only his νοῦς: his νοῦς, see fr. 6 (7), was mixed up with nothing, because if mixed up with anything, then it must have been mixed up with everything: but ἐν παντὶ παντὸς μοῖρα ἔνεστι πλὴν νόου, and again παντάπασι δὲ οὐδὲν ἀποκρίνεται οὐδὲ διακρίνεται τὸ ἕτερον ἀπὸ τοῦ ἑτέρου πλὴν νόου . . ἀλλ' ὁτέων πλεῖστα ἔνι, ταῦτα ἐνδηλότατα ἓν ἕκαστόν ἐστι καὶ ἦν: that is each individual thing is what it is by having in it the greatest number of ὁμοιομερῆ στοιχεῖα, particles like to it in kind. The full and able exposition of Aristotle, phys. I 4, is well worth comparing with Lucr. and Anaxagoras himself. **880** a v. occurring four times in almost the same words. **882** *rob. saxi*: II 449 *duri robora ferri*; Virg. geor. I 162 *grave robur aratri*: Lucr. perhaps got it from Pacuvius 11, where for the ms. *fruges frendo sola sacsic probore*, read *Fruges frendo sola saxsi sic protritas robore*. **883** *aliquid* i.e. eorum *quae*: Plaut. Men. 192 *quam quisquam qui impetrant*; Virg. ecl. II 71 *aliquid . . quorum indiget usus*, but there the gen. makes it much less harsh; as II 583 *Nil esse, . . quorum natura*: comp. VI 814 *vitai copia desit* i.e. iis *Quos* cet.; Aen. XI 172 *Magna tropaea ferunt quos dat* cet. where Wagner gives several other instances from Virgil: the idiom is found in prose; Valer. Max. II 10 1 *ne de aliqua re, quae in his relatae erant, videretur dubitasse*; Livy XLI 2 2 *nec quicquam eos, quae . . agerentur, fallebat*. **885 (884)** *lapidi* is abl.: so 1111 *de parti*, II 520 *mucroni*, VI 66 *rationi*: see n. to 978 *fini*. Comp. Plautus asin. 31 *ubi lapis lapidem terit*, in a different sense. The transposition of these two vss. renders the language and argument quite perspicuous without altering a letter of the mss.: just as blood, etc. should be seen in the corn which we eat; so should blood, etc. be seen in the grass which animals eat; milk, etc. in the waters which sheep drink; ash, smoke, fire in the wood which is burned. **887** the constr. Lach. explains thus, *dulces guttas mittere* tales *quali oves sunt ubere lactis*: *ubere* is briefly said for *sapore uberis*: comp. Prop. I 2 21 *facies aderat nullis obnoxia gemmis, Qualis Apelleis est color in tabulis.* *lanigerae*: comp. *balantes, squamigeri* and *pennipotentes*, likewise used absolutely. *ub. lac.*: so II 370 and Tibullus *ubera lactis*; Lamb. quotes from Varro *mammam lactis*. [Comp. Eur. Phoen. 1526 ματρὸς ἐμᾶς διδύμοισι γάλακτος παρὰ μαστοῖς.] **895 896** very like 814 815, expressing the epicurean doctrine of *primordia* against Anaxagoras as there against Empedocles. **895** *multimodis*: see n. to 683 *omnimodis*.

897—920: but you say trees often take fire by rubbing against each other: true, but for all that fire is not in them; else it would burst forth at any moment: the fact is fire and firs have many first-beginnings in common, just as the words have letters in common; but the two things, as the two words, are yet quite distinct. In this way if you think a thing cannot be, unless its first-beginnings are of a like nature,

then you must give to these human feelings, in order that they may make a man.—This passage in meaning and in language greatly resembles 803—829: the reason is plain: the particles of Anaxagoras seemed to Lucr. liable to the same objections as the four elements of Empedocles, each giving to his elements those secondary qualities which only belong to things in being. **900** *flam. flore*: editors comp. *πυρὸς ἄνθος* of Homer and Aeschylus, and IV 450 *lucernarum florentia lumina flammis.* **902** *sem. ardoris*, which yet have none whatever of the properties of fire. **904** *facta*, fully made, opposed of course to the *semina*, which might in other circumstances form water or anything else: comp. Tib. (Lygdam.) III 1 12 *littera facta*; Cic. acad. pr. II 2 *factus imperator*; Brutus 30 *facta quodammodo oratio*; ad Att. II 24 3 *qui illuc factus institutusque venisset*; Pliny paneg. 20 *adeo nihil aut certe parum intererat inter imperatorem factum et futurum*; Ov. ars III 233 *neque ad illa licet populo nisi facta venire*; [Mart. II 26 3 *Iam te rem factam, Bithynice, credis habere.*] **907** *paulo ante* i.e. 817 foll. where the language is almost the same: see notes there. **912** *ignes et lignum*: because here fire coming from wood is the question; in 820 *caelum mare terras* cet. because there it is the four elements that is the subject examined. **915—920** here again he closes a long discussion with a short argument appealing to common sense to shew to what absurdities such premisses might lead: see 701 foll. 759 foll. 984 (998) foll. **918** *tibi*: see n. to 797. **920** comp. Aen. XI 90. **919 920** comp. II 976 *Scilicet et risu tremulo concussa cachinnant Et lacrimis spargunt rorantibus ora genasque*: in each case he pushes the argument to what he deems the last absurdity, that of endowing first-beginnings with human feelings. And, if a tree cannot produce fire without having fires latent, why should a man be able to laugh or cry, if he have not in him laughing and crying elements? Mr Poste of Oriel in a valuable communication to me points out that I did Lucretius injustice in making him put this argument into Anaxagoras' mouth: 'Lucr.' he says 'does not charge Anaxag. with being bound to hold that all ἀνομοιομερῆ were composed of similar parts: such a charge would not be true: he only says that in the ἀνομοιομερῆ Anaxag. concedes the principle that a thing *may* be composed of ingredients unlike itself, and asks why then shall we not believe that the miscalled ὁμοιομερῆ are actually so composed'. Aristotle, as Mr Poste observes, in the part. anim. II 1, p. 647 a, 2—14, makes the sensories ὁμοιομερῆ, and prob. therefore Anaxag. did the same. However so far as I know there is no evidence as to what Anaxag. did hold on this point: but comp. II 973—990.

921—950: listen now: inspired by the muses I enter on an untrodden path to cull a wreath yet worn by none: I am going to burst the bonds of religion; and clear up a dark subject by lucid verses, verses

o'erlaid with the honey of the muses, in order to beguile my readers to their own profit, even as the rim of the cup is smeared with honey to entice children to drink the bitter but wholesome draught of wormwood. —The poet has hitherto explained the nature of his two great principles of void and atoms, and shewn the insufficiency of those of rival teachers: he now, before proceeding to apply these two principles to explaining the system of the universe and of this world of ours, calls attention to his theme in this lofty exordium. **922** *an. fal.*: see n. to 136. **923** comp. Aen. IX 197 *magno laudum percussus amore.* **924** *incussit am.*: so 19 *incutiens blandum per pectora amorem*; Virg. geor. II 476 *ingenti percussus amore* i.e. musarum. **926—950** repeated IV 1—25, except the last 4 words. **926** foll. there are many well-known imitations of these vss.: by Virg. geor. III 10 foll. joined with 291 foll.; Hor. sat. II 4 84; epist. I 19 21 foll.; Manil. I 4—6; and others. **926** comp. 'Antipater Thess. ep. 24 l. 5, II p. 115, τὰν ἄτριπτον καὶ ἀνέμβατον ἀτραπὸν ἄλλοις' J. E. M. **927** *integros* hitherto untasted by any one, with perhaps the notion of unsullied: Hor. od. I 26 6 *o quae fontibus integris Gaudes*; Nemesianus cyneg. 11, in his imitation, *intacto premimus vestigia musco.* [On Horace here and Lucr. see Herz in Hermes VIII p. 262 n. 3. Luc. Mueller compares Lucil. XXX 2 *Quantum haurire animus Musarum ec fontibu' gestit.*] **930** *vel. tem.*; IV 587 *Pinea semiferi capitis velamina*; Ovid ex Ponto III 2 75 *dum velat tempora vitta*; Aen. V 72 *velat materna tempora myrto.* **932** *Relig. nod.*: see n. to 109. **933** *obsc. lucida*: see n. to 639 *Clarus ob obscuram*: Cic. de nat. deor. I 58 Cotta says to the epicurean Velleius *iudico tamen de re obscura atque difficillima a te dictum esse dilucide.* **934** *contingens*, **938** *contingunt* and **947** *contingere*: Lamb. here and elsewhere rightly makes this word a compound of *tango*: VI 1188 *croci contacta colore*: so Ov. met. II 123 and XIV 607 *contigit*; Sen. Hipp. 714 *contactus*. *continctus* is not found in Lucr.; Virg. geor. III 403 and 448 *contingunt* is probably the same form. **935** *non ab nulla rat.* means of course with very great reason: it seems best to understand *ab* in a sense derived from that illustrated in n. to 693 *contra sensus ab sensibus*: *stare, pugnare ab* = *stare, pugnare cum*; comp. the common use of *stare ab Romanis* in Livy who says *quae pars cum Romanis stabat* with the same meaning: *non ab nulla ratione* then will mean *non cum nulla rat.* or *non contra rationem*; comp. Mart. III 30 5 *Cum ratione licet dicas te vivere summa, Quod vivis, nulla cum ratione facis*: so that it = Cicero's *non sine ratione esse*; and may be more precisely illustrated by Cic. de off. I 7 *omnis enim quae a ratione suscipitur de aliqua re institutio*; D. Brutus ap Cic. ad fam. XI 10 1 *tu enim a certo sensu et vero iudicas de nobis*; Balbus ap. Cic. ad Att. IX 7 B 3 *illud certe scio me ab singulari amore ac benevolentia...tibi scribere*: comp. too Livy X 31 6 *ab ultima iam dimicantibus spe.* Nay possibly it may resemble

Cic. ad Att. x 11 3 *non sunt ab obsequio nostro*, i.e. the technical *a Platone, ab Isocrate esse*; *Zeno et qui ab eo sunt*, etc. See too Draeger hist. synt. I p. 579 § 4. **936** *taetra* denotes esp. what is nauseous to taste or smell. **936** foll. are quoted by Quintilian and Jerome: comp. Seneca suas. 7 near beg. *decipere vos cogar, veluti salutarem pueris daturus potionem absinthiati poculi*; and Auson. epist. 17. **940** *tenus* with a gen. seems not to be found in Cicero's prose: his correspondent Caelius employs it, as well as Livy, Quintilian, etc. **941** *dec. non cap.* in form resembles Enn. ann. 360 *Nec cum capta capi* cet. imitated in Aen. VII 295 *Num capti potuere capi* cet. but the sense differs: it is rightly explained perhaps by Turneb. adv. VI 14 'tractum esse videtur a feris avibus piscibus; nam fovea pedica nassa area esca decipiuntur atque capiuntur, in damnumque et incommodum incidunt: non tamen pueri cet.': [comp. Antony and Cleop. v 2 40 *who are in this Relieved, but not betrayed*;] Tasso Ger. lib. I 3 *E dall' inganno suo vita riceve*: Fairfax reproduces better the point of Lucr.: *They drinke deceivd and so deceivd they live.* Aen. IV 330 *Non equidem omnino capta ac deserta viderer, capta* is much stronger than *decepta* would be; and Livy XXV 19 11 *quibus artibus ad id locorum nostri et duces et exercitus capti forent*; Cic. ad Att. IV 6 2 *oppressus et captus.* **944** *Tristior*=amarior: IV 125 *tristia centaurea*; 634 *quod triste et amarumst*; VI 780 *saporeque tristia quae sint*; Virg. geor. III 448 *tristi amurca*; Livy XLII 40 3 *sicut medici, cum salutis causa tristiora remedia adhibent.* *quibus* = iis, a quibus, by attraction: Lucr. does not use the dative of the agent after the passive. [On this dative see Draeger hist. synt. I p. 395—398: Cicero and others have more instances than I had supposed, but generally in the case of pronouns *mihi, nobis, quibus* etc. Perhaps Lucr. was led to put the dative here by the fact that the sentence contains an *iis, quibus.* Comp. Catullus' *Pro quo mihi sunt magna bella pugnata.*]
945 *suav. Pierio . . musaeo dulci*: see n. to 258. **949** *dum perspicis* is the idiomatic mood and tense: Ter. eun. 206 *expectabo, dum venit*; from whom I have noted several other instances as well as from Cicero, Seneca and others, as Virg. ecl. IX 23 *dum redeo . . pasce capellas*; Pliny epist. I 15 5 *ut mihi omnia libera servarem, dum Mauricus venit*; [Caelius ap. Cic. epist. VIII 16 3 *dum . . scitur, expecta.*] **950** *compta*: III 258 *quo pacto inter sese mixta quibusque Compta modis vigeant*; IV 27 *quibus e rebus cum corpore compta vigeret*; and III 845 *qui comptu coniugioque Corporis atque animae consistimus uniter apti*: N. P. Howard compares glossarium vetus 'συγκείμενος *comptus, compositus*', and Arnob. IV 37 *ab eius comptu et permixtione sunt absoluti*; and Lach. to II 1061 maintains with reason that the *coemptio* in marriage is the same as Lucretius' *comptu coniugioque*, the sense of buying being a confusion of later times; for with *compsi comptum, coemi coemptum*, comp. *dempsi demptum* and *diremi diremptum, sumpsi* and *suremi* ap.

Festum, *prompsi promptum* and *redemi redemptum*: with *compta fig.* comp. II 814 *quali magis apta figura.*

951—957: I have proved the existence of indestructible atoms and of void or space: are these atoms infinite in number? is this space infinite in extent? **955** *Seu*: for this use of a single *seu*=vel, comp. VI 1003 *sive aestum*, and I 1019; and see C. F. W. Mueller ueb. *sive* p. 21. **957** *profundum* in Lucr. means unfathomably deep, and hence is almost synon. with *immensus*: comp. his use of *solidus, plenus, celer, magnus* and the like in n. to IV 63.

958—987: well then the universe is bounded on no side; for then it must have an end or outside; in which case there must be something beyond it, which may be seen to bound it; but there can be nothing outside the universe, which is therefore boundless on all sides. Again say for the moment space is finite: go now to its verge and fling a javelin: will it go in the direction you throw it, or will it be stopped by something? if there is something beyond to stop it, that something is in the universe; if it goes on, it has not started from the end of space: therefore you will be always in the universe, wherever you fling it. Lastly whatever you see, is bounded by and into something different; earth by sea, sea by earth and the like; but what is there outside to bound the universe?—Lucr. has had great injustice done him here by the misapprehension of his editors and others who strangely take *omne quod est, omne quod est spatium, rerum summa* to be all synonymes: a right explanation of 968 *si iam . . constituatur*, and the transposition which I have made of 984 (998)—987 (1001) will I believe make his argument quite clear: he is going to shew that space is infinite and matter infinite: the former he proves 988 (984)—1007, the latter 1008—1051; but first for the sake of completeness he states in our present section that the universe or *omne* or τὸ πᾶν is infinite. There can of course properly speaking be no proof of this as Lucr. has wisely seen: it must from the nature of the case be shewn by a series of identical propositions, call them as you please definitions postulates or axioms: these propositions however are most clearly put by him, when he is rightly interpreted. **958** *quod est* is added to *Omne*, as in 523: so 969 *Omne quod est spatium*: it equals τὸ ὄν, which Sen. epist. 58 7 apologises for having so to translate: 'cogor verbum pro vocabulo ponere; sed ita necesse est ponam *quod est*'. τὸ πᾶν is Epicurus' term: Lucr. calls it also *summa omnis, summa summai totius omnis, summa summarum* and sometimes *omnia.* *nul. reg. vi.*: take whichever of the roads through the universe you please, at no point in any of them will you reach its bound: comp. II 260 and 293 *Nec regione loci certa.* [*igitur*: regularly used in transitions; see Hand III p. 195, and lexic. Quintil. sub verb.] **959** *extremum* is the ἄκρον of Epicurus. **961** *ut vid.* i.e. ita ut videatur illud, quo longius noster sensus non sequatur; so that any one standing at this point sees

where the thing ends and something else begins: *haec sensus nat.* = simply *hic sensus*: see n. to II 646. **962** *sequatur*: Aen. VIII 592 *oculisque secuntur Pulveream nubem.* **964** the *ergo* follows from 959 *namque* cet. The above is almost a translation of Epicurus in Diog. x 41 τὸ πᾶν ἄπειρόν ἐστι· τὸ γὰρ πεπερασμένον ἄκρον ἔχει· τὸ δ' ἄκρον παρ' ἕτερόν τι θεωρεῖται. ὥστε οὐκ ἔχον ἄκρον πέρας οὐκ ἔχει, πέρας δ' οὐκ ἔχον ἄπειρον ἂν εἴη καὶ οὐ πεπερασμένον: comp. too Cic. de div. II 103 *videsne Epicurum.. quemadmodum, quod in natura rerum omne esse dicimus, id infinitum esse concluserit?* quod finitum est *inquit* habet extremum. *quis hoc non dederit?* quod autem habet extremum, id cernitur ex alio extrinsecus. *hoc quoque est concedendum.* at quod omne est, id non cernitur ex alio extrinsecus. *ne hoc quidem negari potest.* nihil igitur cum habeat extremum, infinitum sit necesse est. **966** *quem qu. l. p.*: 289 *ruit qua quicquid fluctibus obstat*: see note: IV 179 *In quem quaeque locum diverso numine tendunt*; Cic. de orat. I 130 *ut, in quo quisque artificio excelleret, is in suo genere Roscius diceretur*; Livy IV 4 10 *in quam cuique feminae convenisset domum*; 48 10 *ut quos quisque posset.. pellicerent*; XXXIX 16 13 *quo quisque loco positus erit, quod imperabitur impigre praestare*; [Caes. b. civ. I 76 4 *edicunt, penes quem quisque sit Caesaris miles, ut producantur*; b. Gall. III 4 2 *ut quaeque pars castrorum nudata defensoribus premi videbatur, eo occurrere.*] **967** I am not clear whether *quisque* or *locus* is subject of *relinquit*, I believe the former is.

968 *si iam* must be noted: when thus used, usually as here with a pres. subj., but not always, it means granting for the moment such or such for the sake of argument, yet that which is affirmed will still follow, or that which is denied will still not follow: the reasoning therefore is, granting for the moment space to be finite, yet none the less the general conclusion will be true that the *omne* is infinite; it therefore introduces another proof of this fact; and has nothing to do with proving space to be infinite: the demonstration of that begins at 988 (984): comp. III 540 *si iam libeat concedere falsum Et dare...Mortalem tamen* cet.; V 195 *Quod si iam rerum ignorem primordia quae sint, Hoc tamen* cet.: also I 396 with imperf. *Nec, si iam posset, sine inani posset*; and II 974 with indic. *Principiis si iam est sensus tribuendus*, and III 766 *quod si iam fit, fateare necessest*; and 843 *si iam nostro sentit* cet.: see also IV 1171 *Sed tamen esto iam*: the force of the expression is well seen in Caes. de bell. civ. II 31 5 *quod si iam, inquit, haec explorata habeamus, quae de exercitus alienatione dicuntur, quae quidem ego aut omnino falsa aut certe minora opinione esse confido, quanto* cet. For this use of *si iam* and a similar one of *ut iam* in Cicero and others and *iam ut* in Livy and Caesar see Madv. de fin. IV 66. **969** *procurrat* is technical: Livy XXXIV 39 3 *non modo ad emittenda cum procursu, quo plurimum concitantur tela, spatium habebat, sed*; XXVIII 14 3 *ab neutra parte procursum telumve*

missum. **970** *Ultimus* is added to give force and point to *extr. oras*: it appears to be proleptic; he runs forward to the outmost edge, so as then to be standing on its farthest point: comp. Cic. de nat. deor. I 54 *si inmensam et interminatam in omnis partis magnitudinem regionum videretis, in quam se iniciens animus...peregrinatur ut nullam tamen oram ultimi videat, in qua possit insistere*; de fin. I 17 *nec ultimum nec extremum*; 29 *extremum et ultimum*; II 6 *id extremum, id ultimum*; [in Verr. V 166 *apud homines in extremis atque ultimis gentibus positos*;] Caes. de bell. civ. I 4 3 *decurritur ad illud extremum atque ultimum senatus consultum.* **971** comp. Aen. II 50 *validis ingentem viribus hastam...Contorsit.* **976** *exempta fine*: 1007 *Finibus exemptis*; so Ovid *exempto, dempto, posito fine.* **977** *probeat*: III 864 *probet*: *praebere* and *debere*, for which we find *praehibeo* and sometimes *dehibeo* in the best mss. of Plautus, are analogous. *probeat officiatque*: 973 *prohibere obstareque*, and above *officere atque obstare*; *pugnet et obstet*; also II 784, 786 and 794 *officiunt obstantque, inpediunt prohibentque, contra pugnet et obstet*: his constant imitator Arnob. II 11 has *officiant nihil nihilque inpediant quominus.* **978** *fini* is 'in the mark' or 'limit' aimed at: Lucr. has many such ablatives, *colli tussi orbi bili sordi pelli*, as well as *navi igni imbri* and even *labi*; *mucroni rationi parti lapidi*: and with 976 *fine*, 978 *fini*, 979 *fine* comp. IV 232 *luce*, 235 *luci*: in Greek words he has these ablatives in *i*, *tripodi Cilici Heliconi*, as noted above: for abl. in *i* in other writers see Neue I p. 213 foll. **979** in either case it has not started from the limit of the *omne*: in the former case body has stopped it, and this body must be in the universe; in the latter space has afforded it room to fly on. Notice *finis* thrice within three lines in three senses: observe too *effugium* in 975 and 984 with different meanings; and see n. to 875. **980** *sequar*: so II 983 *Quippe sequar*: I will follow up, press the argument. *oras extr.* the outer edge of the *omne.* **981** here too the use of *fiat* in one sense seems actually to suggest to him *Fiet uti* in a different sense; so strangely does he love such assonances; and in addition to what has been said here and to 875, obs. in 983 *Effugiumque fugae.* **983** *prolatet* is to enlarge the bounds, and thus ever to give room for further flight. Bentl. in 970 for *Ultimus* proposed *Nuntius* without necessity; but he rightly saw, as Wak. observes, that this illustration was suggested to Lucr. by the Roman mode of declaring war: in the words of Livy I 32 12 *fieri solitum ut fetialis hastam...ad fines eorum ferret...hastam in fines eorum emittebat*: comp. also Servius to Aen. IX 53, who after explaining this custom adds 'Varro in Caleno ita ait duces, cum primum hostilem agrum introitum ierant, ominis causa prius hastam in eum agrum mittebant ut castris locum caperent'. But you cannot go out of the *omne* to fling a spear into a neighbour's bounds. A similar dilemma is said to have been used by Archytas to prove the infinity of body: go to the extremity of heaven and try to put out your hand or

staff: you can or cannot: and so on. In very similar language too Locke essay II 13 21 seeks to prove space infinite: he asks 'whether if god placed a man at the extremity of corporeal beings, he could not stretch his hand beyond his body: if he could, then he would put his arm where there was before space without body...if he could not stretch out his hand, it must be because of some external hindrance ...and then I ask whether that which hinders his hand from moving onwards be substance or accident, something or nothing'.

984 (998)—987 (1001): he concludes his argument on the *omne* with a short statement taken from what comes under the sight of all: comp. what is said above on 701 foll. 759 foll. 915 foll.: comp. also II 471—477, III 367—369, V 506—508, 556—563, 646—649. That these vss. should be placed here admits I think of no question: they utterly destroy the sequence of the reasoning, where they come in mss. For a probable explanation of why they got out of place see vol. I p. 29: ignorance of the different stages of the argument would suggest that *Postremo* must follow *Praeterea* of 988; and therefore the first editor would not unnaturally give to this addition of the poet's the place it has in all mss. All finite things bound and are bounded by something discontinuous and distinct in kind: comp. the stoic Cleomedes de meteor. I 6 at end *πᾶν τὸ πεπερασμένον εἰς ἑτερογενὲς περατοῦται καὶ ὅ ἐστιν ἕτερον τοῦ πεπερασμένου. οἷον εὐθὺς ἐν τοῖς ὅλοις ὁ ἀὴρ περατούμενος εἰς ἑτερογενῆ καταλήγει, τόν τε αἰθέρα καὶ τὸ ὕδωρ κ.τ.λ.* **984** *ante oculos*: see n. to 62.

988 (984)—1007: but space or void is likewise infinite; else matter during past eternity must have sunk in a mass to the bottom, and nothing could exist: but as space is infinite on all hands, there is no lowest point to which first-beginnings can tend: they have boundless room to move in for ever.—Having shewn the *omne* to be infinite, he now proceeds to decide one of the two questions mooted above 953 foll. and to prove space to be infinite. **988** *summai totius* is another name for the *omne*. **991** *confluxet*: see n. to 233. **992** *sub caeli tegmine* recurs II 663 and V 1016, after Cic. Arat. 47 *luto sub tegmine caeli*. **992** *geri*, **999** *geruntur*: see n. to 328: the metaph. is of course the same; though I find a foreign critic can mistake what I thought plain terms. **996** *At nunc*: see n. to 169. **999** *in ads. motu*: so II 297 *quo nunc in motu*; 309 *cum rerum primordia sint in motu*; but IV 392 *et adsiduo sunt omnia motu*. **1000** *inferna* I have no doubt is what Lucr. wrote: to Lucr. and Epic. their conception of atoms implied, as we shall see in II, their racing through space in parallel right lines in one direction. This inherent motion both Epic. and Lucr. conceived as a motion downwards with reference to our world: comp. in fact what he has said a few lines before; and see the acute remarks in the N. British Review p. 222, 'gravitation in its apparent action seemed to shew a universal tendency in one direction; this then he claimed as an inherent property of his atoms: a claim no broader than the claim made by Newton...and at first sight much more conceivable: at first sight only, for indeed atoms pouring onward, as imagined by our author, could be no source of power. Motion in mechanics has no meaning except as denoting a change of relative position: all atoms moving, as Lucretius fancied, at one speed and in parallel lines would relatively to one another have been in perfect rest...Lucr. *unconsciously assumed the world as his basis* by which to measure direction and velocity'. When by the artifice spoken of, II 216 foll., atoms were enabled to clash and combine, both Epicurus and Lucr. conceived the rising up of atoms in a direction more or less contrary to the only natural motion as that which enabled things to come into being and remain in being, and rendered possible the existence and maintenance of the *summa rerum*. It is utterly vain for Lach. to attempt to controvert this: comp. the words of Epic. quoted in p. 111, *τὰ ὑπερείδοντα καὶ στέλλοντα κατὰ τὰς ἀντικοπάς*, of which Lucretius' *inf. supp.* cet. is the paraphrase; comp. too 1035 foll. I am compelled to be thus diffuse owing to the strange way in which Lucretius' words and my own have been misunderstood. Of course from the nature of the case Lucretius' conception of *inferna*, 'from beneath', implied every kind of motion upwards, whether perpendicularly or obliquely upwards, all of which would have more or less of a sustaining power in opposition to the inherent downward tendency. Take once more Epicurus' own words l. l. 61, where he is speaking of his atoms moving freely, when nothing impedes, *οὔθ' ἡ ἄνω οὔθ' ἡ εἰς τὸ πλάγιον διὰ τῶν κρούσεων φορὰ οὔθ' ἡ κάτω διὰ τῶν ἰδίων βαρῶν.* **1001** and **1036** *Ex infinito* i.e. spatio; as V 367 *Ex infinito quae possint forte coorta*; 408 *Ex infinito sunt corpora plura coorta*; 414 *Ex infinito fuerat quaecumque coorta*: but I 1025 *Ex infinito* = Ex inf. tempore; which in the similar passages V 188 and 423 is expressed, *Ex infinito iam tempore percita plagis*: so indifferent is Lucr. to such ambiguities. *Ex infinito* appears from 1036 *Ex inf. suboriri*, and VI 666 *Ex infinito...suppeditare*, to depend on *suppeditantur*, but perhaps it refers to *cita* as well. *cita* has its full participial force, as also II 85 *cum cita saepe* and IV 546 *regio cita*: so Hor. epod. 9 20 *Puppes sinistrorsum citae*. **1002** *profundi* is here a subst. as often in Lucr.: so *natura, habenas, summam profundi*: but he only thus uses it in the gen. sing. **1004** repeated V 1216. **1005** *restat ire*: V 227 *Cui tantum ...restet transire malorum*; Hor. epist. I 6 27 *Ire tamen restat, Numa quo devenit*; [Val. Flacc. I 457 *tibi...restat deprendere patris Relliquias.*] *meando* goes with *facere*. **1006** *copia* i.e. spatii. Comp. with this and 996, Cic. de nat. deor. I 54 *in hac igitur inmensitate latitudinum longitudinum altitudinum infinita vis innumerabilium volitat atomorum* cet. where the *infinita vis* is very Lucretian. **1006 1007** notice here the poetical redundancy of expression, which with him has also a philosophical import.

1008—1051: and the sum of things and matter too are infinite: the other question proposed above: for space being infinite, if matter were finite, then nothing in being could exist one moment: this world for example and all its parts would dissolve into their atoms; or rather could never have existed; for it is only by an infinite supply of matter that this earth and heaven can be maintained: the mutual clashings of atoms might keep this world, or any other world, supplied for a time; but only for a time: nay without infinite matter even these clashings could not go on. 1008 *rerum summa*: see n. to 235, and 333. *summa* is with Lucr. a very indefinite term: we have seen that *summa omnis*, *summa summai totius omnis*, *summa summarum* and the like are all synonymes of the *omne* or universe: *summa loci* is the infinite void or space: as then *res* is his proper term for things in being, *summa rerum* denotes the whole sum of things in being, the whole number numberless of worlds in being throughout infinite space, even as *haec rerum summa* means this world of ours: and this is its regular and usual meaning, as 502 *Unde omnis rerum nunc constet summa creata*, and II 530 *Ex infinito summam rerum usque tenere*. But then as this *summa rerum* is infinite, and as the first-beginnings, out of which it comes and into which it passes back, are also infinite, and as worlds somewhere in the universe are always rising into being and perishing, and thus the relations between the *res* and the *primordia* are constantly changing; the infinity of *res* and that of *primordia* got mixed together so inextricably, that sometimes, as in our present passage, *summa rerum* means the whole infinite sum of matter, both things in being and atoms out of which they come: sometimes, as I 334, *summa rerum* is as vague as its cognate *natura rerum*; see also n. to 619. Once, VI 606, as the context fixes the meaning, he ventures to use *rerum summa* for *haec rerum summa* or *hic mundus*; while 649 it has again its most extensive sense. 1009 *Ne possit, tenet*: Livy XXIV 19 7 *Marcellus...tenuit ne irrito incepto abiretur*: also III 29 8; IV 30 16; VII 8 5; XXXVII 51 3; Ovid met. VII 146; [Sen. epist. 103 4 *non teneo ne noceant, sed ne fallant*: (*teneo ne* Schultess: *te ne* mss.);] so with *ut*, Livy XXVIII 45 13; III 24 2 *obtinuit ut*. 1012 *Aut* [ita ut] *alterutrum eorum* i.e. aut inane aut corpus, si *alterum* i.e. aut corpus aut inane, non *terminet* illud alterum, *Simplice natura*, i.e. solum, *pateat tamen*, i.e. etiamsi alterum desinat, *inmoderatum*. The text is quite sound here, excepting of course the lacuna; though some recent critics have pulled it strangely to pieces. *Aut etiam*: IV 315 *aut etiam quod* cet.; 935 *aut corio sunt Aut etiam conchis aut callo aut cortice tectae*; V 359 and 701 *Aut etiam quia*; Ov. ex Ponto III 4 11 *Nos, quibus ingenium longi minuere labores, Aut etiam nullum forsitan ante fuit*: comp. IV 356 *Sive etiam*. [For *aut etiam* comp. Cic. epist. I 9 16 *quod de illo acceperant aut etiam suspicabantur*; IV 13 3 *aut etiam sontibus*; XI 6 2 *aut ita haberi senatum, ut.., aut etiam, si..., me*

non adesse; ad Q. fr. I 1 8 *aut etiam*; I 1 38; I 3 1 *aut etiam ne te videre noluerim*; I 4 1; II 15 (16) 1 *ab aequis vero aut etiam a propensis in hanc partem*: for *sive etiam* see Cic. ad Q. fr. I 1 4 *ac resistas sive etiam.. occurras*: for *vel etiam* epist. XIII 1 4 *vel,.. vel etiam*.] *nisi...tamen*: Hand and others deny that *nisi* can=si non: but comp. Lucr. VI 591 *Quod nisi prorumpit, tamen* cet.; Plaut. truc. II 7 12 *hoc adsimile est quasi de fluvio qui aquam derivat sibi: Nisi derivetur, tamen omnis ea aqua abeat in mare*: in both places *nisi tamen* is used precisely as here: Tac. ann. III 54 *ac nisi provinciarum copiae... subvenerint, nostra nos scilicet nemora nostraeque villae tuebuntur*; Livy XXI 41 15 *nec est alius ab tergo exercitus qui, nisi nos vincimus, hosti obsistat*; Ov. remed. 245 *Quod nisi firmata* (=si non firmata) *properaris mente reverti*; espec. trist. I 8 31 *Quid, nisi convictu causisque valentibus essem, Temporis et longi vinctus amore tibi? Quid, nisi tot lusus et tot mea seria nosses, Tot nossem lusus seriaque ipse tua? Quid, si duntaxat Romae tibi cognitus essem?*; Mart. X 73 7 *A te missa venit: possem nisi munus amare, Marce, tuum, possem nomen amare meum*; [Sen. rhet. controv. I 1 7 *at nisi impetravero ut boni fratres sint, impetrabo ne mali patres sint*; and just as Lucr., Cic. epist. III 12 3 *nisi iam tunc omnia negotia cum summa tua dignitate diligentissime confecissem,...tamen hac mihi affinitate nuntiata non maiore equidem studio, sed acrius, apertius, significantius dignitatem tuam defendissem.*] *alterum*: for the elision see n. to III 904. 1013 *Simplice* will hardly be found elsewhere, *simplici* being the common form: *duplice*, *triplice*, *septemplice* are equally rare: see n. to II 635 *pernice*. *inmoderatum*: Cic de nat. deor. II 65 translates the *ἄπειρον αἰθέρα* of Euripides by *inmoderatum aethera*. On the lacuna see notes 1 and transl. 1014 *templa*: see n. to 120. 1015 *divum cor. san.* existing in the intermundia. 1018 *magnum per inane*, which occurs four times between this v. and II 109, is adopted by Virg. ecl. VI 31: II 1108 *magnum* is an epithet of *omne*: the word thus applied acquires a poetical intensity of meaning; as *solidus profundus celer* and the like: see n. to IV 63 *tenuis*. Of this and the preceding sections Epic. Diog. X 41 gives a good summary, *καὶ μὴν καὶ τῷ πλήθει τῶν σωμάτων ἄπειρόν ἐστι τὸ πᾶν καὶ τῷ μεγέθει τοῦ κενοῦ· εἴτε γὰρ ἦν τὸ κενὸν ἄπειρον τὰ δὲ σώματα ὡρισμένα, οὐδαμοῦ ἂν ἔμενε τὰ σώματα, ἀλλ᾽ ἐφέρετο κατὰ τὸ ἄπειρον κενὸν διεσπαρμένα, οὐκ ἔχοντα τὰ ὑπερείδοντα καὶ στέλλοντα κατὰ τὰς ἀντικοπάς· εἴτε τὸ κενὸν ἦν ὡρισμένον, οὐκ ἂν εἶχε τὰ ἄπειρα σώματα ὅπου ἂν ἔστη*: of this passage and the one cited to 964 Lucretius' argument in 958—1051 is an accurate expansion. The last words would alone prove 984—987 (998—1001) to be an unmeaning interruption of the argument where they come in mss. 1019 *Sive ad pot.*=Sive adeo, or Seu potius; but the pleonasm adds emphasis: comp. III 949 *Atque etiam potius*; IV 356 *Sive etiam potius*: Lucilius has *sive adeo*, Cicero once *sive adeo*, once *sive etiam*; [Caesar b. c.

I 27 2 *sive etiam quod*; II 27 2 *sive etiam auribus Vari serviunt*;] auctor ad Heren. IV 55 *atque adeo multo potius*: see C. F. W. Mueller ueb. *sive* p. 24.

1021—1027 are repeated with some changes V 419—429 and 187—194. It is mere blind chance, not providence, that has arranged out of the atoms this world and other worlds; therefore these atoms never could have thus combined, unless there was an infinite supply. **1021** for these three abls. see n. to 183. **1022** *suo* monosyl. here and V 420: so III 1025 *sis oculis* after Ennius; who, ann. 278, has *suos* a monos.; as is the abl. *mieis* in corp. inscr. I 38: the old titulus Mummianus ib. 542 has in one v. *Visum animo suo perfecit tua pace rogans te*; though *tua pace* may be for *tuăm pacĕm*; but such a syniz. is rare in hexameters, frequent in dramatic poetry: even Sen. Agam. 250 has *suapte* dissyl. and Troad. 191 *mānibus meis debitos.* **1024** *mutata* refers of course only to change of place, as 911 *eadem paulo inter se mutata*; 913 *Inter se paulo mutatis sunt elementis*; 681 *mutarique ordine quaedam*: comp. Plaut. Amph. 274 *Neque se luna quoquam mutat*; Ov. trist. V 2 73 *Hinc ego dum muter*; [Livy V 46 11 *nec iniussu populi mutari finibus posset nec nisi dictator dictus* cet. Nonius p. 351 4 *mutare*, transferre: Lucilius lib. XXVI . . *mutes aliquo tecum*...] **1025** *Ex inf.* i.e. tempore: comp. V 188 and 423 and n. to 1001; and also Aen. IX 63 *collecta fatigat edendi Ex longo rabies.* *percita* a favourite word in this sense. **1026** *Omne genus*: Lucr. is very fond of this idiom, common in the best writers: *quod genus* also occurs often; and VI 917 *Hoc genus in rebus*: an adj. *omnigenus* is unknown to him; see n. to 683. *motus* and *coetus* are of course acc. plur. **1027** *disposituras*: so V 192; see n. to 653: it appears to be peculiar to Lucr.
1028 partly recurs V 194. **1029** *magnos annos*: V 644 *Quae volvunt magnos in magnis mensibus annos.* There is no doubt an allusion, perhaps sarcastic, to the stoical theories of the *magnus annus*, or cycle: in each of these great years the world went through precisely the same changes from its first formation to its ecpyrosis. Stob. eclog. I 264 tells us that Heraclitus reckoned this year at 18,000, Diogenes the stoic at 365 times 18,000 solar years. The poet then means to say, this world, though its term of existence is nothing compared with the eternity of the universe, yet in its present form outlives many of your great years. **1031** [*avid. mare*: Hor. od. I 28 18.] *fluminis undis* is the stream of water belonging to each *amnis*: see Forc. and Aen. II 305 *rapidus montano flumine torrens*, which he cites: comp. IV 1036 *Fluminis ingentis fluctus*; [Catul. 64 282 *quos propter fluminis undas Aura parit flores.*] **1033** *summissa*, if from Lucr., has I now think the sense common in Caesar and Livy: *summittere subsidia, auxilia, praesidia* and the like; and indicates a supply sent up when needed: *amissa reparare in tempore quaeque*: comp. too Hor. od. IV 4 63 *Monstrumve submisere Colchi Maius*; sat. II 4 43 *Vinea submittit capreas non semper edules.* **1034** *vivant* = *durent* by a poetical licence: see n. to V 538: a stoic or peripatetic could here use it literally; but to the *philosopher* Lucr. these things are rather an example, as he says V 125, of what is *vitali motu sensuque remotum.* **1036** see n. to 1000. **1037** *quaeque* is accus. agreeing with *amissa.* **1038** foll. comp. II 1122 foll. **1039** *am. cor.*: so 810 *amisso iam corpore*; IV 535 *Nec te fallit item quid corporis auferat*: this use of *corpus* in the sense of 'losing flesh', and *facere* 'gaining flesh' is found in Cicero: see lexicons: I have noted from Ovid four instances, of which am. I 6 5 *Longus amor tales corpus tenuavit in usus Aptaque subducto corpore membra dedit*, is curious: [see too Mart. lib. spect. 7 6 *Inque omni nusquam corpore corpus erat.*]
1041 *aversa viai*, a grecism to which I know no exact parallel: Horace's *sceleris purus, operum solutis* are somewhat like: and Wak. aptly compares too his *abstineto irarum calidaeque rixae* and *desine querellarum*, which stand almost or quite alone. [But Aen. X 441 *desistere pugnae*: comp. too Horace's *laborum decipitur, regnavit populorum*, and *neque ille Sepositi ciceris nec longae invidit avenae.*] Enn. ann. 209 *viai* seems to depend not on *flexere* but *quo.* **1042** *sum. omn. quaec.*, the whole of any sum of matter gathered together, such as our *summa* or *mundus* here spoken of. **1044** *Cudere*, an expressive metaphor with *plaga* or *ictus*, to give the force of Epicurus' ἀντικοπή, the counter-stroke which makes the atom change its course and enables it to combine: these vss. illustrate the *inferna supp.* of 1000: the *plagae* or collisions enable atoms to change their directions, so that enough may come up in all directions from beneath to keep any *summa* in being; but yet these *plagae* could not suffice without an infinite store of matter to supply them in number sufficient. **1045** *queatur*: III 1010 *potestur*: these or other forms are common enough in the old writers; as *quitur quitast nequitur nequitum poteratur possitur*; but can only be used when followed by an infin. pass.; as in the case of *coeptus, desitus sum.*
1049 comp. 1036. **1050** *Et tamen*: IV 811 *Et tamen in rebus*; V 768 *Et tamen ipsa suo* cet.; 1177 *Et tamen omnino quod* cet.; 1096 *Et ramosa tamen cum* cet.; 1125 *Et tamen e summo* cet.; VI 603 *Et tamen interdum*, etc.: the force of the particles is 'and putting this or other considerations out of the way, even then', or 'and yet after all', or the like: see n. to V 1177.

1052—1082: do not believe with some that all things tend to a centre, and therefore the world keeps together without external force, and things and animals beneath the earth cannot tumble into the sky any more than we can fly up to it: that our day is their night, their day our night: this is sheer folly: there is no centre in infinity, and, if there were, things would not be attracted any more than repelled by it: void everywhere alike yields to all body alike.—It is the stoics doubtless

whom Lucr. here mainly attacks, though the peripatetics and some others held a similar doctrine: they taught that there was but one finite world surrounded by an infinite void; and that the world was upheld in the way which Lucr. so clearly explains here, by things pressing to the centre: the earth resting ἰσοκρατῶς in the words of Zeno in Stob. ecl. I 19 4, at about the centre of the κόσμος, in the same way that the whole finite κόσμος remains fast in the infinite void. Had Epicurus, while retaining his conceptions of infinite space and matter and innumerable worlds and systems, seen fit to adopt this stoical doctrine of things tending to a centre, and so to make his atoms rush from all sides of space alike towards a centre, he might have anticipated the doctrine of universal gravity: see what is said at II 251 foll. But Lucr. is right in rejecting the absurd reasons which the stoics gave for things pressing to the centre of one finite world in the midst of infinite void, and he well exposes here, 1083—1113, and II 184—215, their inconsistency in making some things seek, others fly from the centre. **1052** *fuge* with an infin. is found in Virgil Horace Ovid and Tibullus: Lucr. has an infin. after *fugito* too more than once: see n. to 658. **1053** *quod dicunt* = id quod dicunt, or ut dicunt: so *quod dico*, 1080 *sua quod natura petit*, II 369 *quod natura reposcit*, and the like: Lach. seems to me only to involve the constr. **1055** *ictibus ext.* of atoms: see 1042 and 1050. **1056** the stoic in Cic. de nat. deor. II 115 says *omnes partes eius undique medium locum capessentes nituntur aequaliter* cet. and Zeno himself in Stob. ecl. l. l. πάντα τὰ μέρη τοῦ κόσμου ἐπὶ τὸ μέσον τοῦ κόσμου τὴν φορὰν ἔχειν, μάλιστα δὲ τὰ βάρος ἔχοντα. **1057** is parenthetical: Lach. rightly compares the form of expr. in IV 366 *Aera si credis privatum lumine posse Indugredi*: comp. also II 603 *neque posse in terra sistere terram*; and Pliny II 162 *sic terrae, arcentibus cunctis, nisi in se locus non est.* **1058 1059** Lach. and some older editors join these with 1057: this may be right, but I prefer to connect them with 1056: *Et* [fuge credere] *quae pond. sunt* cet. *sunt*: comp. II 226 *feruntur*; V 630 *abest, propinquat*: in the first two cases we might easily read *sint* and *ferantur*; but I make no change, because the best writers often mix such indicative clauses with the orat. obl.: Caes. bell. Gall. V 11 4 *Labieno scribit ut quam plurimas posset iis legionibus, quae sunt apud eum, naves instituat*; and Sall. Iug. 54 1 *hortatur ad cetera, quae levia sunt, parem animum gerant*, much resemble our passage: [Caes. b. civ. I 87 1 *iis qui amiserant restituatur*, where see Kramer's note.] **1059** *retro posta*: if two men are feet to feet, the one is supposed to be reversed or turned upside down, just as your shadow in the water looks to be: Cic. acad. pr. II 123 *qui adversis vestigiis stent contra nostra vestigia, quos ἀντίποδας vocatis.* **1060** unquestionably is joined with what precedes: see notes 1: Lach. here labours in vain: Lucian Demon. 22 gives just the same illustration, φυσικόν τινα περὶ τῶν ἀντιπόδων διαλεγόμενον ἀναστήσας καὶ ἐπὶ φρέαρ ἀγαγὼν καὶ

δείξας αὐτῷ τὴν ἐν τῷ ὕδατι σκιὰν ἤρετο· τοιούτους ἄρα τοὺς ἀντίποδας εἶναι λέγεις;

1061 if there is here any anacol. at all, it is very slight and natural: *fuge credere*, on which what precedes depends, is so distant, that he prefers to go on with another verb *Contendunt*. *suppa*: Festus quotes Lucilius for this word; and Accius 575 has *suppa* (imper.): it=supinus. **1062** foll. comp. Pliny II 161 *illo*, i.e. vulgo, *quaerente cur non decidant contra siti, tamquam non ratio praesto sit ut nos non decidere mirentur illi.* **1065** *Illi* the people there, easily inferred from what precedes: yet it is possible that *Illi*, as Lamb. suggests, is the adv.: a well-known form: but the pronoun contrasts better with *nos*: Virg. geor. I 250 *Nosque ubi primus equis oriens adflavit anhelis, Illic* (MPR, Probus: *Illis* Seneca) *sera rubens accendit lumina vesper*, there is a similar doubt. **1066** the subject changes, *et* [illos contendunt] *dividere.* *tempora caeli* are of course the seasons of the year; as VI 362 *cum caeli tempora constant*; and as *anni tempora* and *annorum tempora* are often used by him: with them it is midsummer, when with us it is midwinter, and therefore their nights are always equal to our days. **1067** *diebus* i.e. *nostris*, is a harsh ellipse. *agitare* = agere, a sense common in prose too: Cic. Verr. II 154 *dies festi agitantur.* **1068** *stolidis*, the stoics: see n. to 641. **1073** the mutilated sentence makes it impossible to tell whether *longe* goes with *alia* or a lost infin. at end of the verse. **1075** *per non medium*: so II 930 *ex non sensibus*; 932 *a non sensu*: comp. Horace's *non sutor*, Sallust's *omnia non serva*, Cicero's *non corpus*, Quintilian's *non exordio, non voce, non orator*: [comp. Ov. met. IV 187 *aliquis de dis non tristibus.*] **1076** *Aeq. pond.* more fully expressed II 239 *Aeque ponderibus non aequis*; comp. Epic. in Diog. Laert. X 43 παρεχομένου τοῦ κενοῦ τὴν ἴξιν ὁμοίαν καὶ τῇ κουφοτάτῃ καὶ τῇ βαρυτάτῃ τὸν αἰῶνα, where ἴξιν should surely be εἶξιν: comp. Sextus adv. math. X 223 διὰ τὴν εἶξιν φέρεται δι᾽ αὐτοῦ, i.e. ἡ ἄτομος. **1077** *quisquam locus*: II 857 *Nec... saporem denique quemquam*; III 234 *Nec calor est quisquam*; 875 *quemquam sibi sensum in morte futurum*; IV 689 *haud quisquam...eorum*; Valer. Flaccus VIII 272 *irae quisquam modus*; Caelius ap. Cic. ad. fam. VIII 17 2 *nec homo nec ordo quisquam*; Plaut. Men. 447 *Numquam quicquam facinus feci*; most. 607 *neque ego taetriorem beluam...quemquam*; Suet. Caes. 59 *quoquam incepto*; Manil. II 841 *cardine quoquam*; Tac. dial. 29 *nec cuiquam serio ministerio*; [Sen. de brev. vitae 9 1 init. *potestne quisquam sensus hominum eorum dici qui prudentiam iactant* cet.: *dico* mss. *dici* Frid. Schultess in commentat. in hon. F. Buech. Herm. Useneri a soc. phil. Bonn.; Prop. V 7 13 *nec cuiquam melior sperande puellae.*] With appellatives it is common enough, *quisquam parens, civis, homo, discipulus, cocus, amator, vir, puer, heros, iuvenis, mulier, virgo, anus, amica.* But Cicero too can not only say *cuiquam ordini* and *cuiquam generi hominum*; but also ad Att. V 10 4 *ne rumor*

quidem quisquam; ad fam. III 10 6 *cuiquam legationi*. 1079 1080 almost repeated II 236 237. 1079 *subsistere*: Plaut. epid. I 1 77 *nisi suffulcis firmiter, Non potes subsistere.*

1083—1113: again they teach that while earth and water tend to the centre, air and fire fly from it, and that the earth sends up food to the tree-tops: they thus contradict themselves: the truth is that the whole of this doctrine is alike false; for, space being infinite, if matter were finite, the world and all that is in it would in a moment dissolve into their first-beginnings: if on any one side matter fails, the door of destruction is opened to all alike.—Zeno l. l. thus teaches, οὐ πάντως δὲ σῶμα βάρος ἔχειν, ἀλλ' ἀβαρῆ εἶναι ἀέρα καὶ πῦρ· γίγνεσθαι δὲ καὶ ταῦτά πως ἐπὶ τὸ τῆς ὅλης σφαίρας τοῦ κόσμου μέσον, τὴν δὲ σύστασιν πρὸς τὴν περιφέρειαν αὐτοῦ ποιεῖσθαι κ.τ.λ.: this exactly agrees with what Lucr. affirms of them; who in II 184—215 clearly and well refutes the theory. **1085** in this v. and the lost one the two conditions of water seem to have been expressed, when it tumbles in rain from the sky, and when it is kept together as it were by the earth's substance in the form of the sea and rivers. **1089** *tremere, tremulus, tremor*, are all used by him to express the bickering of the stars or of fires. **1090** *cae. caer.* recurs VI 96: he has *caerula mundi*, the same thing; and *caerula* alone: Ennius before him *cava caerula* and *caerula caeli templa*. *pasci*: 231 *unde aether sidera pascit*; V 524 *Quo cuiusque cibus vocat...Flammea per caelum pascentis corpora passim*. **1091** *se ibi*: the elision of a long monosyl. before a short vowel is confirmed within narrow limits: see Haupt obs. crit. p. 17 who cites from Lucr. I 136, 922, V 97 *Nec me animi*; III 6 *Quod te imitari*; IV 1188 *tu animo*; I 234 *Quod si in eo*: but these are all easy elisions and frequent even in Ovid. Lach. adds III 574 *In se animam*, which is a false reading, as well as I 874 *quae alienigenis*, VI 755 *vi ibus*, two mere conjectures of his own which both violate the laws of elision: see Luc. Mueller de re metr. p. 284. **1094—1101** see notes 1: it is clear that in the lost vss. the clause *nisi* cet. had to be completed; then an apodosis to *quoniam* cet. must have come, shewing that these people were not only wrong, but inconsistent: then a new sentence must have followed, declaring that space being infinite, as even the stoics admitted, matter as proved above must be infinite likewise, *Ne* cet. **1102** *volucri* a natural metaphor: IV 205 *volucri levitate*; VI 173 *volucri lumine*: Shakespeare has *the volant speed of flame*. *moen. mundi*: see n. to 73: the ether being outside would go first, then heaven and air, then earth and all in it would follow and be commingled in the ruins of heaven. **1105** *penetr. templa*, the innermost quarters, i.e. farthest removed from us: it means therefore that the whole heaven would tumble in on earth and be mixed in wild ruin: Virgil has *tectis*, and *adytis penetralibus*, and *penetrali in sede*; Seneca *penetrales deos*; Cicero and Catullus have *penetrales focos*: elsewhere in Lucr. *penetralis* = qui penetrat. **1107** *rerum* here seems to be everything in and on the earth; so that the atoms of these *res* and of heaven are mixed up with those *omnis terrae*. **1108** *Corpora*, i.e. prima, *solventes*: VI 235 *soluens differt primordia vini*: dissolving the union of the atoms; the word more commonly signifies breaking up the thing itself: Lucan II 290 *cum ruat arduus aether, Terra labet, mixto coeuntis pondere mundi*. **1109** Plaut. rud. 1287 *de bonis quod restat reliquiarum*; [Cic. epist. XII 4 1 *reliquiarum nihil fuisset*.] **1111** *parti* recurs III 611, IV 515, V 511, 721, VI 694, 721; inscr. Lat. I 206 25 and 27 *in partei*: 198 51 *parti*: the accus. *partim* is found VI 88, 384 and 661; for these forms in other authors see Neue I p. 205 and 241: the adv. *partim* is really this accus.; see n. to 20. **1112** *ianua leti* recurs V 373; and is adopted by Virgil and Ovid, and after them by Statius Val. Flaccus and Arnobius more than once: III 67 *leti portas cunctarier ante*; Ovid trist. III 2 30 has also *meique Interitus clausas esse vetate fores*, having said a few lines above *totiens nostri pulsata sepulcri Ianua*: which illustrates the expression. In this the poets have idealised the solid stone doors of their tombs: comp. the *Orci traditus thensauro* of Naevius in his epitaph; and what Eucharis in the corp. inscr. 1009 says of her own and the surrounding tombs: *Heus oculo errante quei aspicis leti domus*.

1114—1117: master fully what has been said, and the whole of nature will soon be revealed to you. **1114** see notes 1: *sei pernosces*: *nosco, noscere, pernoscere* is the usage of Lucr. not *novi, nosse*: *sei pernosces* has been strangely objected to, because Lucr. should have said *pernoris*, as if this usage of the simple for the perf. future were not common in the best writers: Hor. od. I 1 31 *Quod si me lyricis vatibus inseres, Sublimi feriam sidera vertice*; Ov. ars I 469 *Si non accipiet scriptum inlectumque remittet, Lecturam spera*; [fasti III 351 *certe credemur, ait, si verba sequetur Exitus*.] Often the two tenses are used together: Virg. geor. I 155—157; Mart. IV 86 6 *Si te pectore, si tenebit ore...Si damnaverit*; Sen. Thyest. 634 *Si steterit animus, si metu corpus rigens Remittet artus*; Cic. ad Att. XII 28 1 *Si igitur tu illum conveneris...et, si quid ita conficies*, cet. Madvig opusc. II 80 says 'futurum simplex quam tenui discrimine ab exacto in tali coniunctione interdum distet etiam apud bonos prosae orationis scriptores, nemo ignorat'; and then he proceeds to shew how strangely in the Lex Rubria, inscr. Lat. I 205, written a few years after the death of Lucr., the two futures are mixed together without any difference of time, and cites Livy XXXV 35 17. [So Plaut. Cas. II 4 28 *Si sors autem decolassit, gladium faciam culcitam Eumque incumbam*; but capt. 496 *Si ea decolabit, redibo huc ad senem ad cenam asperam*. Very like Lucr. is Cic. epist. VI 2 3 *quae vis insit in his paucis verbis...si attendes, quod facis, profecto etiam sine meis litteris intelleges te aliquid habere* cet.; and VII 19 *quamquam*

tu, si attente leges, si saepius, per te omnia consequere ut certe intellegas.] *par. op.* = *parva opera* or *labore*: Hor. epist. I 7 8 has *opella forensis*: no other example of the word is quoted; later writers have *operula*.

BOOK II.

1—61: sweet though it be to see from a place of safety the storm-tost sailor or the battling soldier, far sweeter is it from the heights of philosophy to look down on men lost in error and struggling for power and wealth: what blindness not to see how little is wanted to rid us of pain and bring us every innocent pleasure; often merely fresh air and fine weather, not palaces nor banquets! can purple cure a fever? It is not wealth or birth or power, no nor armies and navies that can free us from fear of religion and death, and all the cares of life: reason alone can deliver us from all such empty terrors. **1** and **5** *Suave*; so *nec mirum* more than once, as well as the indeclinable *pote*, with which other writers too so often omit the verb subst. and which, to judge from the *dei qui potes* (δυνατοί) of Varro, had the force of a neuter: these neuter adjectives are rare exceptions, the usage of Lucr., as of the older writers generally, being not to omit the subst. verb, except in some standing formulæ of speech, among which these instances in Lucr. may be reckoned: see Ritschl opusc. II 608—618; but see too Ribbeck trag. fragm. 2 ed. p. XXI. *mari* is the abl.: obs. *magno* and 2 *magnum*, and 27 28 *auroque aurataque*, and 48 49 *metus metuunt*, and 54—59 *tenebris tenebris tenebris tenebras*. [*mari magno* occurs more than once in Ennius, and *mare magnum* in Lucil. XXX 72.] **1** comp. Archippus Mein. com. Gr. frag. II p. 727 Ὡς ἡδὺ τὴν θάλατταν ἀπὸ τῆς γῆς ὁρᾶν, Ὦ μῆτέρ, ἐστι μὴ πλέοντα μηδαμῶς; and Cic. ad Att. II 7 2 *Nunc vero cum cogar exire de navi, non abiectis sed ereptis gubernaculis, cupio istorum naufragia ex terra intueri; cupio, ut ait tuus amicus Sophocles*, κἂν ὑπὸ στέγῃ Πυκνῆς ἀκούειν ψεκάδος εὑδούσῃ φρενί: comp. the whole frag. from the tympanistae, esp. τοῦ γῆς ἐπιψαύσαντα, which further illustrates Lucr.: it appears therefore to be a common proverb, the hardness of which he tries to soften by the explanation of 3: Hor. epist. I 11 10 *Neptunum procul e terra spectare furentem.* **2** comp. n. to I 253. **3** Prop. I 10 3 *O noctem meminisse mihi iucunda voluptas*; Aetna 251 *divina est animi ac iucunda voluptas.* **4** *quibus malis careas* = ea mala quibus careas: *careas* = caremus: see n. to 41 foll. and to I 327, and comp. 36 *Iacteris.* **7** foll. often imitated, as ciris 14 *Si me iam summa sapientia pangeret arce...Unde hominum errores longe lateque per orbem Despicere atque humiles possem contemnere curas*; Ovid met. XV 147 *iuvat ire per alta Astra...Palantesque animos passim ac rationis egentes Despectare procul* cet.; Stat. silv. II 2 131 *celsa tu mentis ab arce Despicis errantes.* **8** *doctrina sap.* is governed by *munita*; *munita* has at once its literal meaning, as in *arx munita*, and the common metaphorical one, as in Cic. de div. I 45 *sapientia munitum pectus*: the somewhat involved sentence gives an awkwardness to the epithets; since even in prose *serena templa, edita doctrina sapientum munita* would be natural enough. Lucr. may well have been thinking of Aristoph. clouds 1024 Ὦ καλλίπυργον σοφίαν κλεινοτάτην ἐπασκῶν, for it is a play he would have been likely to enjoy, and I find other points of resemblance: comp. II 1100 foll. and VI 387—422 with clouds 395—402; and VI 124—131 with clouds 404—407; and IV 131—142 with clouds 346 foll. **9—13** L. Mueller compares Lucil. l. inc. 15—21 of his ed. **9** *Despicere* here, as in ciris and Statius, to look down with scorn upon: see notes 1 to IV 418 *Dispicere.* **10** *viam quaerere*, unable to find it, because they reject Epicurus who, VI 26 foll., pointed out the true summum bonum, *atque viam monstravit, tramite parvo Qua possemus ad id recto contendere cursu.* **12 13** *Noctes...opes* repeated III 62. **13** *Ad s. emerg. opes*: V 698 *emergere ad ortus*; Paterc. II 65 *in quod iam emersissent fastigium.* *rer. potiri*, and 50 and III 1027 *rerum potentes* appear to be most general expressions for supreme power of any sort: see Forc. s. *potiri*, whose first example is *Cleanthes solem dominari et rerum potiri putat*; and comp. Cic. in Cat. II 19 *dominationem tamen expectant, rerum potiri volunt.*

16 *hoc aevi quodc.* = omne hoc aevum: [Ov. her. 3 142 *hoc animae*;] Aen. I 78 *quodcumque hoc regni*; Stat. silv. V 3 213 *decus hoc quodcumque lyrae*: so Catull. 1 8 *quidquid hoc libelli.* *nonne videre*: this infin. of indignation is quoted by Donatus to Ter. Phor. II 1 2 *Nec meum imperium ac, mitto imperium: non simultatem meam Revereri saltem*: see Lach. who abundantly illustrates it from Cicero and others: add Livy IX 11 12 *haec ludibria religionum non pudere in lucem proferre et vix pueris dignas ambages senes ac consulares fallendae fidei exquirere!* the idiom is very common, though this is said to be the only ex. in Livy. **17** *latrare*: Enn. ann. 570 *animus cum pectore latrat*, and Paulus Festi *latrare Ennius pro poscere posuit*; Hor. sat. II 2 17 *cum sale panis Latrantem stomachum bene leniet.* *utqui*: see n. to I 755. **18** *mente fruatur Iuc. sensu*: comp. Cic. de fin. III 37 *quis est...qui nulla animo adficiatur voluptate*; and see n. to I 183: *naturam* = the whole nature of man, of which *corp. nat.* of 20 is one part; and the *natura* of 23 again takes up the *nat.* of 17: to illustrate the sense and the asyndeton of 17—19 comp. Sen. epist. 66 45 *apud Epicurum duo bona sunt ex quibus summum illud beatumque componitur, ut corpus sine dolore sit, animus sine perturbatione.* **17—19** thus Epicurus

himself after much more to the same purpose says to Menoeceus, Diog. x 131, that the pleasure which is his end is τὸ μήτ' ἀλγεῖν κατὰ σῶμα μήτε ταράττεσθαι κατὰ ψυχήν. 20 *ad nat....opus*: vi 365 *opus fabricanda ad fulmina*: a constr. common in Cicero and others. 21 *quae d. cumque d.* seems epexegetical of *pauca*: 'but few things are needed, such and such only as free it from pain': with this use of *quaecumque* comp. vi 85 *qua de causa cumque ferantur*; 738 *Averna tibi quae sint loca cumque lacusque Expediam*; Prop. i 10 19 *Cynthia me docuit semper quaecumque petenda Quaeque cavenda forent.* So Philodemus vol. Hercul. ix col. 12 φιλοσόφῳ δ' ἐστὶ πλούτου μικρόν· ὃ παρεδώκαμεν ἀκολούθως τοῖς καθηγεμόσιν ἐν τοῖς περὶ πλούτου λόγοις. 22 foll. are made clear by right punctuation: *uti* is concessive, as Lamb. saw, though otherwise mistaking the meaning of the passage: the subjects to *possint* are the golden statues, the house, the gilded ceilings, etc. of 24 foll.: granted that these refinements can supply at times many exquisite delights, yet nature in their absence can be satisfied often with the simplest enjoyments. *Delicias* has thus its proper force, exactly as in v 1450 *delicias quoque vitae funditus omnis, Carmina picturas, et daedala signa polire.* The poet could well enjoy these refinements, but could also do without them. *interdum*: its position is emphatic and in the manner of Lucr.: v 602 *Nonne vides etiam quam late parvus aquai Prata riget fons interdum*; 1125 *Et tamen e summo, quasi fulmen, deicit ictos Invidia interdum* cet. 22 *substernere* appears to have much the same force as the simple *sternere*: the *sub* perhaps has the meaning it sometimes has in *subministrare* and *submittere*, of a successive or continued supply.

23 *neque* here means simply *non*, a sense which *neque* and *nec* so often had in archaic Latin, and which is not uncommon in classical: so vi 1214 *neque se possent cognoscere ut ipsi*; iii 730 *At neque cur faciant ipsae quareve laborent Dicere suppeditat*: so iv 1217 *neque utrum*: see n. there: and v 839 *nec utrum.* The best account I know of this usage is Ribbeck's, Lat. part. p. 24—26: we find in the twelve tables *nec escit* three times, and *quod nec manifestum erit*: comp. too *res nec mancipi*: it is common enough in Plautus, as trin. 282 where the palimpsest has *neque ullum.* [Zeitschr. f. Oest. Gymn. xxvii p. 829 '*nec*...ist einfach die alte Negation=*ne*, *non*: Plaut. Bacch. i 2 11; iv 4 83; Asin. i 3 3; ii 4 65; Pseud. iv 6 23; Poen. iii 1 13; Most. i 3 83 u. da Lorenz; Curc. i 1 21; Bacch. iii 2 64: Curt. x 6 20'.] Comp. Lucil. i 12 (Mueller) *nec si Carneaden ipsum Orcu' remittat*, [and perhaps vi 33 *Quem neque Lucanis oriundi montibu' tauri Ducere protelo validis cervicibu' possent*;] Catull. 64 83 *Funera Cecropiae nec funera*; 30 4 *Nec facta impia—placent*, a passage often misunderstood; ciris 239 *quod nec sinit Adrastea*; 269 *nec ullo vulnere.* Ribbeck says there are undoubted examples in Livy, Ovid, Quintilian, Tacitus, Suetonius, Juvenal, Florus, Justin: add to his instances from Ovid, trist. iv 1 65;

ex Ponto i 1 19; and Mart. iv 86 5: Virg. ecl. ix 6 *quod nec vortat bene.* [Caes. b. civ. i 58 3 has *neque dum*=nondum.] We have in Lucr. *neque opinantem*: so *necopinus neglego negotium*; and *nescio nequeo*; and *nĕvis nĕvolt nevelles neparcunt*, all in Plautus: Cic. orator 154 *nequire pro non quire...nolle pro non velle.. dicimus*; 157 *non scire quidem barbarum iam videtur, nescire dulcius.* 24 foll. after Odys. η 100 Χρύσειοι δ' ἄρα κοῦροι ἐυδμήτων ἐπὶ βωμῶν Ἕστασαν αἰθομένας δαΐδας μετὰ χερσὶν ἔχοντες, Φαίνοντες νύκτας κατὰ δώματα δαιτυμόνεσσιν: it is possible that these vss. of Homer may have suggested the fashion to wealthy Romans. 27 *fulgēt*: v 1049 *scirēt animoque* is the only other instance of this licence in Lucr. which is much more frequent in Virgil: there is no analogy between this practice and the lengthening of such syllables in Ennius: with him they were really long, and in thesis as well as arsis, *uter essēt induperator* and the like: in Lucr. and Virgil the lengthening is a mere licence permitted in the arsis alone. 28 why an editor should object to *aurata* in Lucr. because *auro* occurs in 27 I do not comprehend: see n. to 1 *magno* and *magnum*: the gilding the *lacunaria* was a necessity with the Romans; the custom is spoken of by Virgil Horace Tibullus Propertius Ovid Lucan Seneca Statius, Val. Flaccus, the Anthologia, Livy Pliny Apuleius Prudentius: [comp. esp. Luc. Phars. x 112 *laqueataque tecta ferebant Divitias, crassumque trabes absconderat aurum.*] It is specially recorded that Pollio did not gild the ceiling of the public library which he built, to spare the eyes of readers. The *auro* of 27 may refer to walls furniture and plate: comp. Livy xli 20 9 *magnificum templum, non laqueatum auro tantum, sed parietibus totis lammina inauratum.* The imitation of our passage in the culex 61 foll. *Si non Assyrio* cet. has 62 *si nitor auri Sub laqueare domus*, shewing that the writer found *aurata* in Lucr.: the general tone of these vss. is also imitated by Virg. geor. ii 461 *Si non ingentem foribus domus alta superbis* cet. 29—33 almost repeated v 1392—1396. 29 *Cum tamen* cet.: comp. 690 *cum tamen inter se versus ac verba necessest Confiteare* cet.; iii 645 *cum mens tamen...non quit*; vi 140 *cum tamen...haurit*: Aen. ix 513 *cum tamen omnis Ferre iuvat subter densa testudine casus*; x 509 *Cum tamen ingentis Rutulorum linquis acervos.* [Perhaps the *tamen* expressing the concession implied in the usual subjunctive, tended to preserve this indic. so usual in the older writers.] The sequence of the whole sentence is this, *Si non sunt...Nec...Nec..., cum tamen...curant*: the *cum* refers to *natura requirit*; the *tamen* refers to the *Si non*: nature wants no more, when they thus simply enjoy themselves none the less although they have none of these luxuries. With 29—33 comp. culex 67 *at pectore puro Saepe super tenero prosternit gramine corpus, Florida cum tellus gemmantes picta per herbas Vere notat dulci distincta coloribus arva*: the *picta* is nearer the *pingebat* of v 1396; and v 461 and other passages are

likewise here imitated. 30 *Prop. aq. riv.* is also found in the culex 388 and Virg. ecl. VIII 87; and *sub. ram. arb. altae* in Aen. VII 108; comp. too Tib. I 1 27 *sub umbra Arboris ad rivos praetereuntis aquae.* **34** Lamb. compares Hor. epist. I 2 48 *Aegroto domini deduxit corpore febres*, where *deduxit* is the active of *decedunt.* 35 *text. pict.*: Cic. Verr. IV 1 *nego ullam picturam neque in tabula neque in textili fuisse quin* cet.; Aen. III 483 *Fert picturatas auri subtemine vestes...Textilibusque onerat donis*; Ael. Lampridius Heliog. 27 *ita ut de acu aut de textili pictura exhiberetur.* 36 *Iacteris...cubandum est*: the potent. because in the 2nd pers. sing.: see n. to 41 *Cum videas*, and to I 327 *possis*; and comp. Plaut. Men. 103 *Standumst in lecto siquid de summo petas.* *pleb. v.*: V 1429 *Dum plebeia tamen sit quae defendere possit*; Prop. III (II) 25 45 *plebeio sandycis amictu.*

39 *Quod superest*: see n. to I 50. *putandum*: see n. to I 111. **40** *Si non forte...effugiunt* = nisi forte eff. *campi* is the *campus Martius*: Horace has *campus* 8 times in this sense, Cic., epist. VII 30 1, *in campo*: Caesar after his consulship remained with his army for three months before Rome and was bitterly attacked by Memmius: does Lucr. here allude to Caesar? 41, and below, *Fervere...Fervere* applied here to the persons and things causing the crowd and bustle: by Varro Virgil and others, see Forc., to the places or things filled with the crowd or bustle, *fervere omnia piratis, Leucaten, litora, fora litibus*, and Lucr. himself IV 608 *Omnia*, i.e. loca, *quae circum fervunt*: with *fervere classem* comp. Accius 482 *classis adit occluditur Fervit. Fervĕre*: so Virgil: the older form; comp. Lucilius' *Fervit aqua et fervet*; *fervit nunc, fervet ad annum*, which seems strange to Quintil. I 6 8: Lucr. l. l. *fervunt*: so V 1095 *fulgĕre*; and *fulgit*, 'it lightens', more than once; yet Lucr. also knows the 2nd conjugation: see n. to VI 160 and 213. 41 foll. *cum videas, statuas, cum videas*: for this use of the pres. potent. or conj. 2nd pers. sing. comp. n. to I 327. Lucr. has II 849 *cum instituas*; III 854 *cum respicias*; IV 572 *cum videas, possis*: Cicero too, orator 225, *cum aut arguas aut refellas*; Sen. epist. 75 4 *qui, et cum videas illum et cum audias, idem est*: Lucr. III 870 has *ubi videas*; V 100 *ubi adportes*; VI 901 *ubi admoveas*: II 35 *si iacteris*; 1000 *si teneas*; III 948 *si pergas, si numquam sis moriturus*; IV 1070 *si non conturbes.* 41 Aen. V 674 *belli simulacra ciebat*; 585 *pugnaeque cient simulacra*; Livy XL 6 5 *divisas bifariam duas acies concurrere ad simulacrum pugnae*; who also has *simulacrum* and *simulacra navalis pugnae* more than once; and *simulacrum decurrentis exercitus.* **42** the *subsidia* being in support in the rear; the cavalry on each flank. **43** comp. Plaut. Bacch. 941 *hoc insunt in equo milites Armati atque animati probe.* **44—46** Lamb. cites Varro ap. Nonium p. 379 *Non fit thesauris, non auro pectu' solutum, Non demunt animis curas ac religiones Persarum montes, non atria diviti' Crassi.* 51 *fulgorem ab auro*: not

unlike is Livy VIII 29 13 *ingenti ardore militum a vulnerum ira*: see Madv. emend. Liv. p. 170, who cites XXIV 30 1 *tanto ardore militum ab ira*: comp. too XLII 62 3 *ferocia ab re bene gesta*; [XXVIII 15 4 *aestus a meridiano sole*; XXIII 34 7 *litterae quoque ab Hannibale ad Philippum inventae*: see Kuehnast p. 54 55 n. 34. So Mart. X 6 5 *longusque a Caesare pulvis*; Hor. od. IV 4 14 *fulvae matris ab ubere Iam lacte depulsum*;] Ter. Andr. 156 *ab illo iniuria*; Plaut. Bacch. 528 *a me nuntius*; also *Turnus ab Aricia, pastor ab Amphryso, nostris ab ovilibus agnus, a fontibus undae, ab Andria ancilla* and the like: Val. Flaccus V 242 expands Lucr. *tum falso fusus ab auro Currere per summi fulgor laquearia tecti*: *ex* is used in the same way I 1086 *magnasque e montibus undas*; Caes. de bell. civ. III 106 2 *vulneribus ex proeliis*; Livy XXV 36 14 *luctus ex morte eorum*; XXXVII 55 4 *legationes ex Asia*; Tac. ann. I 35 *cicatrices ex vulneribus*: and so *de* VI 386, *de caelo fulminis ictus.* 52 *purpureai*: III 689 *gelidai*; IV 537 *nigrai*: he elsewhere avoids this archaism in adjectives, frequent as it is in substantives. 53 *haec rat. pot.*: V 42 *Quae loca vitandi plerumque est nostra potestas*: *haec potestas*, i.e. of conquering religion and the fears of death. *omnis* = omnino: see n. to I 377 on *totus*: comp. Cic. ad Att. XV 20 2 *haec omnis culpa Bruti*; XII 49 1 *Caesaris, propinqui eius, omnis potestas esset*; II 5 1 *erit quaedam nostra potestas*; XIV 13 B 5 *quae tua potestas est*; XVI 16 15 *praesertim cum tota potestas eius rei tua sit, ut* cet.; [Livy X 38 8 *in loco circa omni contecto*: see Kuehnast p. 56.] 54 *laboret*, a favourite word occurring some ten times in this sense. *tenebris*: this word occurs 4 times in as many vss., twice in the metaphorical sense he is so fond of: 15 *Qualibus in tenebris vitae.* **55—61** recur III 87—93, VI 35—41: the three last came I 146—148: see notes there. **55—56** quoted by Seneca epist. 110 6, who adds *quid ergo? non omni puero stultiores sumus qui in luce timemus? sed falsum est, Lucreti, non timemus in luce, omnia nobis fecimus tenebras*: but this is precisely what Lucr. says 54 *Omnis cum in tenebris* cet.: we make of the light of day thick darkness. Comp. Plato Phaedo 77 E ἴσως ἔνι τις καὶ ἐν ἡμῖν παῖς, ὅστις τὰ τοιαῦτα φοβεῖται: with 55—61 L. Mueller compares Lucil. XV 5—10.

62—79: and now I will explain the motion of atoms, how thereby everything comes into and goes out of being: matter is not inseparably united; it is ever going to or coming from things: every individual is thus changing, while the whole remains the same. 62 *Nunc age... Expediam* is thus used by Virg. geor. IV 149; but the phrase recurs also in Lucr. VI 495 and 738. Observe *genitalia, gignant, genitas.* **65** *mobilitas* is his usual word for swiftness of motion: literally great power, facility of moving: he uses also *mobilis mobiliter* and *mobilius*: he has prob. selected the word for this technical purpose, because neither *velocitas* nor *celeritas* would suit the metre. 66 *tu te dictis praebere memento*:

III 135 *tu cetera percipe dicta*, IV 931 *tu fac ne ventis verba profundam*, VI 920 *Quo magis attentas auris animumque reposco*: comp. the above with auctor ad Heren. III 1 *nunc tu fac attentum te praebeas*: *nos proficisci ad instituta pergemus.* It is probable then that the somewhat magisterial tone in which Lucr. so often addresses Memmius was thought becoming in a philosophical teacher. **67** *inter se stipata* has, like so many other terms we have noted in Lucr., a pregnant meaning, so massed together as not to admit of separation: I 345 *Undique materies quoniam stipata quiesset*: atoms are not united together, as the parts of each atom are united in the atom; I 610 *Quae minimis stipata cohaerent partibus arte.* **68** *materies* is of course here as elsewhere the collective term for atoms. **69** *fluere* in this sense of wasting, ebbing away is a favourite expression of Lucr. *omnia* becomes the object to *subducere* in 70. **71** *summa* and **75** *rerum summa* have their proper sense of the whole sum or universe of things; but Lucr. illustrates what he means from what goes on in our world, in *haec rerum summa*, as is natural; for what takes place throughout the universe is more or less a repetition of what happens here. **76** *mutua* is used as an adv. 5 or 6 times in Lucr.: V 1100 we have *mutua inter se*, as here: Virgil uses *per mutua*: Lepidus in Cic. ad fam. X 34 says *summa studia officii mutuo inter nos certatim constiterunt pro nostra inter nos familiaritate.* The sense is that mortals receive life and in their turn give it to others, and so the chain of being goes on: comp. III 964 foll. **77** Ov. met. XV 420 *sic tempore verti Cernimus atque illas adsumere robora gentes, Concidere has.* **79** the well-known metaphor of the torch-race: Varro de re rust. III 16 9 *nunc cursu lampada tibi trado*; the καθάπερ λαμπάδα τὸν βίον παραδίδοντες of Plato. [For the torch-race see Wecklein in Hermes vol. 7 p. 437—452, esp. p. 439—442.]

80—141: first-beginnings, when alone, move ceaselessly through the infinite void by their own inherent motion or it may be after collision with another: some of intricate shapes form after collision a close union and thus help to compose hard bodies; others rebound to greater distances, and form softer bodies; some do not unite at all, but continue to wander through space: the motes in a sunbeam will give some notion of what is meant: single atoms unite into small bodies, these small bodies form themselves into somewhat larger ones; till by little and little they become visible and are seen to move in the sun, though why they move is not seen. **80** foll. atoms, as we have seen, have weight as an inherent property, by which they move down space in straight lines at uniform speeds, until they come into collision with others: how that is possible, will be explained 216 foll. **80** *Si*: to begin a sentence thus abruptly with *si* is in the manner of Lucr.: comp. 1017, III 170, 406, 946, 1053, IV 1026, V 210, 319, 1334. κινοῦνται συνεχῶς αἱ ἄτομοι, and also ἰσοταχῶς, says Epicurus himself in Diog. X 43. **84** this is the κίνησις κατὰ στάθμην or natural motion sheer downwards. **85** *ictu alterius*, the motion ἄνω κατὰ πληγὴν καὶ παλμόν: therefore he adds *forte*, because this motion is casual. *cita*: see n. to I 1001. *saepe*: see n. to V 1231. **88** *ibus* Lach. wrongly introduces by conjecture into two other places; but it recurs I believe VI 1012: whatever its quantity in Plautus, *ībus*, as you might expect from *quĭbus*, is that of hexam. verse; as in Lucil. lib. inc. 114 Mueller: for demonstr. pron. connected with rel. of preceding v. see n. to I 718. **90** *reminiscere*, as proved I 958 foll. *totius summa*, another name for the *omne.* **91** for the position of *corpora* in the second clause see n. to I 15: with *neque habere ubi* comp. VI 1052 *neque habet qua tranet ut ante*; Livy XXVII 12 3 *nec ubi consisteret...habenti*; Cic. ad Att. XIII 2 2 *pedem ubi ponat in suo non habet*; [Brutus ap. Cic. epist. XI 1 4 *ubi consistamus non habemus.*] **92** foll. notice the poetical tautology to emphasise what he says, *sine fine modoque, inmensum patere*; *in cunctas partis* and *undique*; *ostendi* and *probatumst*; and comp. I 1006 1007. **94** *Pluribus ost.* I 988...1007.

96 *reddita* in this sense of assigned as a property or the like is very common in Lucr.: see 65 *Reddita mobilitas* cet.; also 142, 681, 758, I 203, 577, III 618, IV 178, VI 494. **97** *exercita*: 120 *Conciliis et discidiis exercita crebris*; IV 862 *exercita motu.* **98** *confulta* is a ἅπαξ λεγόμ.: if the word is right, which is somewhat doubtful, it must mean, resting and pressing one against the other, as the finer and smoother atoms would do, which form the air, sunlight, etc.: it = mutuo fulta: comp. Stat. Theb. VI 862 *diu pendent per mutua fulti Bracchia.* The abl. *magnis interv.* and 99 *brev. spatiis* and 101 *Exiguis int.* mean leaving great or small spaces between, with great or small spaces between: the great and small are of course relative merely, and have reference to the extremely minute atoms; the great distance would be inconceivably small in relation to anything of sensible magnitude: comp. Epic. Diog. Laert. X 43 καὶ αἱ μὲν μακρὰν ἀπ' ἀλλήλων διίστανται, αἱ δ' αὐτὸν τὸν παλμὸν ἴσχουσιν, ὅταν τύχωσιν ἐπὶ τὴν περιπλοκὴν κεκλιμέναι ἢ στεγαζόμεναι παρὰ τῶν πλεκτικῶν: some rebound far, when the atoms are smooth; others have simply a throbbing or oscillation, when they have got entangled or covered in by those which are shaped for entangling. However close they are, even if in a mass of iron, 'there is space between them: they collide, they recoil, they oscillate', to use Tyndall's words. And this continual oscillation of atoms, in a lump of iron even, goes on exactly at the same speed as that of the atoms racing down space: strange as may appear this anticipation by Epic. and Lucr. of modern theory. The force of στεγαζόμεναι in relation to the moving atoms is well illustrated by its use in 66, where Epic. is speaking of the soul: ὅταν τὰ στεγάζοντα καὶ περιέχοντα μὴ τοιαῦτ' ᾖ ἐν οἷς νῦν οὖσα ἔχει ταύτας τὰς κινήσεις. **99** *ab ictu*: see n. to VI 968. **102** *perplexis fig.*: 459 *perplexis indupedita*;

463 *e perplexis...elementis*; 394 *hamatis inter se perque plicatis*; III 331 *Inplexis principiis*. 103 *radices*: these lay the first foundations or roots of stone. *fera ferri*: Cicero and Tibullus thus play with the assonance *ferus et ferreus*, and Ennius has *fero ferro*. 105 *Paucula*, i.e. compared with the whole number. 106 *longe longeque*: so III 69; Hor. sat. I 6 18. This *longe*, as 98 *magnis*, is of course relative: far only in respect of the extremely small atom. 111 *etiam* seems clearly to have reference to *recepta*: quamvis recepta, tamen non potuere etiam consociare: with this comp. *sic deinde locutus* for *sic loc. deinde*, and the like, in Virgil. [112 *uti memoro* apparently = qualem (or quem) memoro, and resembles I 442 *Aut erit, ut possunt in eo res esse*: comp. Plaut. Amph. 731 *Recte dicit, ut commeminit*, where *ut* = qualia or quae.] *simulacrum* and *imago* are exactly synon.: in IV he regularly uses *imago* or *imaginibus*, *simulacra* in the plur. nom. and acc. for the εἴδωλα of Epicurus. 114 *Contemplator enim cum* recurs VI 189: Virg. geor. I 187 *Contemplator item cum*: IV 61 *Contemplator*. *cum... cumque*: I know no other example of *cumque* following *cum*. 115 curiously varied Aen. III 151 *qua se Plena per insertas fundebat luna fenestras*. 116 *per inane* seems loosely put for the air which serves as a place for these motes to move about in, and therefore is to them what the real *inane* is to the atoms: just below, 151, he contrasts the air which is not *inane vacuum* with 158 the real *inane vacuum*: Aen. XII 906 *vacuum per inane* is still more loosely put for the air: and Ovid in the metam. so uses *per inane* and *per inania*. 117 *lumine in ipso*: see n. to IV 736 *aere in ipso*. 118 *proelia pugnas* recurs IV 1009: Lach. well illustrates it by *pugnant proeliant, turbas lites, morbum mortem, donum praemium*, from Plautus and Terence. [So Lucil. XXIX 25 *coniugat communicat*: see Mueller there; Plaut. Amph. 891 *stupri dedecoris*: see Ussing there.] Comp. too Livy XLV 40 1 *ponderibusque auri argenti*: in old Latin the idiom is widely extended; in Livy I 32 11 a single sentence of an old formula contains *quarum rerum litium causarum, populi Romani Quiritium, quas res dari solvi fieri oportuit*: the words have usually a close and formal connexion: *usus fructus, emptio venditio, aequum bonum, calce harenato*. 119 *dare pausam*, like *dare motum, discessum, ruinam* and the like, = facere pausam, facere finem: see n. to IV 41. 123 *Dumtaxat*: this curious word occurs in another of its senses 931: there it = *certe*, 'at all events', a sense it often has in the younger Pliny. Cic. Brut. 285, cited by Hand Turs. II p. 33, *hoc recte dumtaxat*, the word seems to mean, 'so far as it goes', as here: III 377 it means 'only', 'so much and no more': a more usual sense. [For the meaning 'at all events' see Cic. epist. XII 1 1 *ut mihi videamur omne iam ad tempus ab illo dumtaxat sordidissimo periculo tuti futuri*; XVI 26 1 (Quintus') *verberavi te cogitationis tacito dumtaxat convicio*: auct. bell. Afr. 90 3 *se eis dumtaxat vitam concessu-*

rum. It is also used in one of the two first senses by Q. Cic. de pet. 53 *multitudo ex eo, quod dumtaxat oratione in contionibus ac iudicio popularis fuisti, te a suis commodis non alienum futurum*; and Cic. ad Q. fr. I 1 11 *dumtaxat finibus iis praestabis*.] The corp. inscr. Lat. will shew that it was a very old legal term, which passed into the common language. 126 *turbare* = turbari: so 438, V 502, 504, VI 370. 129 *ibi* i.e. in the sunbeams. 132 *a princ.* from the first-beginnings upwards: comp. 138. 137 *proporro*: see n. to V 312. 138 *ascendit*, because what is invisible is said to be below our sense: III 274 *Nec magis hac infra quicquam est*, IV 111 *primordia tantum Sunt infra nostros sensus*. 141 depends on the prec. relative clause, as illustrated in n. to I 718. *app. ap.*: see n. to I 826. Lucr. has here anticipated in a striking way the most modern theories of the most advanced thinkers: see N. British Review l. l. p. 220; and Prof. Maxwell, Theory of heat p. 285 'the opinion that the observed properties of visible bodies apparently at rest are due to the action of invisible molecules in rapid motion is to be found in Lucretius'. In his Introductory lecture p. 21 he says 'investigations of this kind, combined with a study of various phenomena of diffusion and of dissipation of energy, have recently added greatly to the evidence in favour of the hypothesis that bodies are systems of molecules in motion'. Martha too, p. 287, is worth reading: Lucr. he tells us, had a glimpse of that great principle of modern physics which teaches that the general forces of nature never are at rest even in the inorganic world: we do not see this perpetual movement of the atoms in bodies, because our eyes are too gross to apprehend it.

142—164: the sun rises, and the world is at once clothed in light; yet its rays are complex, not single, and do not pass through a void: how much more swiftly then must first-beginnings move! since they travel through a perfect void and travel singly, and each is one indivisible whole. 144 *Primum* cet.: Aen. IX 459 *Et iam prima novo spargebat lumine terras...aurora*: so that Virgil seems, as Lach. remarks, to have understood *primum* of time, not of order. 145 *var. vol.*: see n. to I 589. 146 *tenerum*: see n. to I 207. *liquidis voc.*: IV 981 *citharae liquidum carmen*; V 1379 *liquidas avium voces*. *loca*: Virg. geor. IV 515 *et maestis late loca questibus implet*. 148 *Convestire*: Cicero in his Aratea uses I find *convestire* or *vestire* 5 times of light: Lucr. has prob. borrowed this, as many other expressions, from him: Aen. VI 640 *lumine vestit*: par. lost III 10 *as with a mantle didst invest*. 150 *vapor, vapores*, etc. occur very frequently in Lucr. and always in the sense of heat. 152 *aerias quasi...undas* i.e. the air which offers a resistance like waves of water. [154 *complexa*: see n. to V 922.] 155 there is at once an internal and external hindrance to absolutely swift motion. *inter se retr.*: they pull and are pulled back, because in one ray there is an enormous number of atoms combined. *extra*: see 151.

156 *Officiuntur*, the only instance in Lucr. where a verb which governs a dat. in the active, has a personal passive: he twice uses the part. *offectus*, IV 763 V 776. The licence is altogether rare: Horace has *imperor* and *invideor*; Ovid thus uses *credor* more than once, and *dubitor*; Virgil has the partic. *creditus*; Tacitus *credebatur*; Caecina ap. Cic., the auctor ad Heren. and others have *persuasus est*; the auctor ad Heren. has also *supersedenda causa*; the auctor bell. Hisp. *est litata*; Metellus Numidicus *illi interdicti*: several of these are homely writers. **158** *Cum...foris* is in contrast with 151 *Non per...undas*; **159** *ipsa...feruntur* with 153 *Nec singill....ire*: there can be no doubt therefore that 159 *ipsa, suis e partibus una* refers to the *primordia*, each one of which is a *unum suis e partibus*, that is one indivisible whole of parts which are absolute leasts and incapable of existing alone, as we have explained so fully I 599 foll.: with *suis e partibus una* comp. III 545 *contracta suis e partibus* [anima]: he could hardly without an awkward periphrasis have expressed what he means without using the plur. *una*; nor is it any harsher than Cic. pro Flacco 63 *unis moribus et numquam mutatis legibus vivunt*; or the auctor ad Heren. III 33 *duplices similitudines esse debent; unae rerum, alterae verborum. ipsa, una e* = ipsa, quorum quicque est unum e. **160** only means that they race perpendicularly down space, so as to continue the direction they have once taken, *in unum locum, in quem coepere* [ferri]. **163 164** recur IV 207 208. **163** *Multiplex*, many times as much, πολλαπλάσιος. **164** *pervolgant* = I 4 Concelebras. Epicurus says himself in Diog. Laert. X 46 ἡ διὰ τοῦ κενοῦ φορὰ κατὰ μηδεμίαν ἀπάντησιν τῶν ἀντικοψάντων γινομένη πᾶν μῆκος περιληπτὸν ἐν ἀπερινοήτῳ χρόνῳ συντελεῖ. The above comparison and illustration are plain enough in reference to the movement of the unobstructed atom down space; but the atom's own motion is of the same speed, even when it is caught in the hardest body and can only oscillate through an inconceivably small space: see above, n. to 98; and below, 297 foll.

165—183: they are greatly mistaken that think the course of nature could not go on, nor the products of the earth and the race of men be continued without divine providence: nay I might prove from the imperfection of this world that it is not divinely created.—That these vss. have no proper connection with what precedes or follows; that 184 continues the argument as it was left at 164; and that in a finished composition 183 and 184 could not stand side by side, has been demonstrated by Lach. He shews with as much certainty as if he had had the poet's ms. before him, that 165—183 must have been a subsequent addition which the author's death prevented him from adapting to the context: in this state the first editor must have introduced them into the body of the poem. Lach. has also proved that V 195—234 which fulfil the promise of 182, are likewise a subsequent addition; as well as the cognate argument of IV 823—857, where the doctrine of final causes in respect of the bodily organs is so earnestly denied. On these and similar sections of the poem see what is said above p. 28—30, where I attempt to carry Lachmann's argument somewhat farther. Some vss. as is said in notes I, are clearly wanting before 165: whether they ever existed in the poem and were not rather lost before it came into the first editor's hands, we may well doubt with Lach. The way in which the latter supplies the meaning of what is wanting, seems to me however somewhat awkward: I should be disposed to make the gods the subject to *persectari* and *videant*, and to take the reasoning to be something like that in Cic. de div. II 105 foll. where it is said *negant* id esse alienum maiestate deorum. *scilicet causas omnium introspicere, ut videant quid cuique conducat.* You must not suppose that the gods have anything to do with the motions and unions of these atoms: nay it would not be even consistent with their majesty and happiness to be tormenting themselves with all these minutiae, 'and to be following up the course of every single atom to see how everything goes on'.

165 *persectari* recurs IV 1010, and appears to be peculiar to Lucr. **167** *quidam*: the stoics are doubtless pointed at, perhaps also the academics. **169** *admoderate* seems also peculiar to Lucr.: Gronov. observ. III 5 compares the *attemperate* of Ter. Andr. 916 which has precisely the same sense. **171** *Et iam cetera* appears to be used almost absolutely, as *cetera, et cetera* are in so many ways: *fieri* or *naturam facere non posse* may be understood from the context. **172 173** these two vss. are connected with the relative clause, as 141 and some of the instances given in n. to I 718. **172** *deducit*: metaphor from leading the bride to her husband: comp. I 96 *Deductast* and n. there. **173** *blanditur propagent* for *blandiendo hortatur ut prop.* as Lach. observes: he compares Vitruv. pref. to III: but comp. too Livy XXI 1 4 *Hannibalem...pueriliter blandientem patri Hamilcari, ut duceretur in Hispaniam.* **174** *quorum* i. e. *hominum*, understood from *genus hum.*: see n. to IV 934. **175** *omnibu' rebus* is so used by Cicero, as div. in Caec. 61 *tu, cum omnibus rebus inferior sis, hac una in re* cet. *ego, si superior omnibus rebus esses, hanc unam ob causam* cet.; similarly III 1026 *Qui melior multis quam tu fuit, improbe, rebus.* **177—181** recur, slightly altered, V 195—199. **179** *reddere*: see n. to I 566 *reddi.* **181** *stat*: Lach. cites I 564 *Stare*, and, a doubtful instance, VI 1058 *Pondere enim fretae partim stant*: perhaps Lucr. was thinking of Lucilius' *stat sentibu' pectus*, and *stat sentibu' fundus*; as Virgil, Horace, and Ovid possibly, when they wrote *stat pulvere caelum, alta stet nive candidum Soracte, saxo stant antra vetusto*, respectively. [See Nonius p. 392 6 and Sisenna quoted there, and esp. Varro Eumenid.] At all events Caecilius' *ager autem stet sentibus* and Titinius' *fundi stabunt sentibus* shew that the phrase was proverbial. Comp. too Aen. III 210 *stant nomine dictae*; and Lucr.

II 843 *manere*, VI 1274 *templa manebant*. *constare* is much oftener used by Lucr. in this sense. Chrysippus wrote several works περὶ τοῦ μηδὲν ἐγκλητὸν εἶναι μηδὲ μεμπτὸν κοσμῷ: to him and other stoics Lucr. plainly refers.

184—215: you are to know too that nothing naturally mounts upwards: flames and the growth of crops and trees are only apparent exceptions: thus blood from a wound spirts up; and a log forced down into the water starts up again; yet we know these things tend downwards by nature: so it is with flame: observe meteors and the like falling to the earth; the rays of the sun tending downwards; lightnings flying about and falling to the ground: this is their natural tendency.—This argument is well and clearly put by Lucr.: it is directed against the stoics: see notes to I 1083 foll. where the same teachers are refuted; and the same false instances of fire, crops and trees are cited. **184** *Nunc locus est*: Virg. geor. II 177 *Nunc locus arvorum ingeniis*: *est* being omitted, as so often by him compared with Lucr. **187** *flam. corp.* a mere periphrasis for *flammae*: *corpora* are not here the *prima corpora*. *tibi dent fraudem* = Cicero's *facere fraudem alicui*: see n. to IV 41. **188** *aug. sum.* recurs V 681. **191** *subsiliunt*: Cicero in setting forth this stoical doctrine, Tusc. disp. I 40, uses the word *subvolent*. **192** *degustant*: so he himself, Virgil and Horace apply *lambere*. *tigna trabesque* here and VI 241 are used in their restricted sense: *tigna* the rafters let into the *trabes* or main beams: 196 they are used generally for any large pieces of timber. **194** *Quod genus* or *quod genus est*, an antique phrase which he and the auctor ad Herennium often use. The latter appears always to omit *est*; as I 14, II 19 bis, 20, 45, 49, III 29, 31; but II 48 *quod genus ii sunt*: this makes Lachmann's insertion of it here and elsewhere still more unjustifiable. Here and in the auctor ad Heren. it means no more than *velut*; as in Lucil. III 29 Muell.: [see the instances Mueller, p. 204, quotes from Cicero de inv.] **196** *Nonne vides*: Lamb. notices his fondness for this phrase. **198** *Derecta*: see n. to VI 823: it has here its literal sense 'perpendicular' opposed to *obliqua*: Caes. bell. Gall. VII 23 *trabes derectae...in solo conlocantur*; IV 17 4 *non sublicae modo derecte ad perpendiculum*. *mag. vi mul.*: Nepos VII 3 3 *non sine magna multorum consensione*; Lucil. lib. inc. 118 Muell. *multorum magnis ictibus*. **200** *plus parte*=plus iusta parte, or as he says himself IV 1231 *plus parte aequa*; i. e. it starts farther out than it would be, if left alone: Ovid trist. III 3 16 *plus in nostro pectore parte tenes*; V 10 30 *tecti plus quoque parte tenet*; fasti IV 301 *plus quam pro parte laborat*: in all these places it may mean *plus dimidia parte*; as in I 617 *pars*; and in Germanicus Caesar Arat. phaen. 588 *Bootes In terras abit et noctis plus parte relinquit*: he means clearly more than half of night, though the expression of Aratus 583 is very obscure, πλεῖον δίχα νυκτὸς ἰούσης: Cicero 364 translates

recedit Post mediam labens claro cum corpore noctem. Mart. II 24 6 *Das partem? 'multum est'. Candide, das aliquid?*: Ovid met. III 43 has then the fuller form, *media plus parte leves erectus in auras*. *multis, omnibus partibus* are also very indefinite in meaning. **202** *deorsum* trisyll., 205 dissyll.: so with *seorsum* and *seorsus*: he also uses indifferently the form *sorsum*: see n. to III 631. **206** so V 1191 *Noctivagaeque faces caeli flammaeque volantes*: comp. Virg. geor. I 366 *noctisque per umbram Flammarum longos a tergo albescere tractus*: Lucan. I 527 *caeloque volantes Obliquas per inane faces* may have had this v. and 213 in his mind. **209** *stellas et sidera*, single stars and constellations: see lexicons, and Macrob. somn. Scip. I 14 21, who so explains Cicero's *illis sempiternis ignibus quae sidera et stellas vocatis*. **211** *lum. cons. arva* means perhaps no more than Virgil's *spargebat lumine terras*; though Arist. poet. 21 mid. says τὸ τὸν καρπὸν μὲν ἀφιέναι σπείρειν, τὸ δὲ τὴν φλόγα ἀπὸ τοῦ ἡλίου ἀνώνυμον· ἀλλ' ὁμοίως ἔχει τοῦτο πρὸς τὸν ἥλιον καὶ τὸ σπείρειν πρὸς τὸν καρπόν, διὸ εἴρηται σπείρων θεοκτίσταν φλόγα. **213** *transversos* and therefore not tending upwards: for the constr. see n. to 217 and 226. **214** *abrupti*: see n. to I 724: Aen. III 199 *ingeminant abruptis nubibus ignes*; Ov. met. VI 696 and VIII 339 *elisi nubibus ignes*. [*abrupti*; 'regelrecht mit *ab*, doch Cic. Phil. 14 12 *haec se prima latrocinio abrupit Antonii*.' Draeger hist. synt. I p. 466.] **215** *concursant* here = discurrunt, its usual sense; III 395 *concursare* = concurrere, to clash. Observe in this passage the frequent assonance alliteration and redundancy of expression by which the poet seeks to give emphasis to his argument, to which he not unnaturally attaches much importance, as refuting his chief adversaries: *sursum ferri sursumque meare*; *sursus versus...Et sursum* answered just after by *deorsum*; *vi* recurring four times within five lines; *Emicat exultans*; 196 *tigna trabesque*; *magna vi multi...aegre*; *sursum revomit, remittit*; *emergant exiliantque*; *sursum succedere* answered by *deorsum deducere*; *stellas et sidera*.

216—224: know too that atoms while travelling down space in parallel straight lines, at quite uncertain times and spots swerve from the perpendicular to an imperceptible amount.—This is the famous κίνησις κατὰ παρέγκλισιν of Epicurus. My general remarks on the theory will be reserved for 292. Cicero de fin. I 19 puts it very clearly, *deinde ibidem homo acutus, cum illud occurreret, si omnia deorsum e regione ferrentur et, ut dixi, ad lineam, numquam fore ut atomus altera alteram posset attingere, itaque attulit rem commenticiam: declinare dixit atomum perpaulum quo nihil posset fieri minus; ita effici complexiones et copulationes et adhaesiones atomorum inter se, ex quo efficeretur mundus omnesque partes mundi quaeque in eo essent*, and comp. de fato 22. **217** *corpora*=of course *prima corpora*. **217** and **226** *rectum per inane* = *recte* or *ad lineam per inane*; as in 213 *Transv.*: = trans-

verse per imbres; *rectum* is used as *primus, postremus* and the like are so often used for their adverbs; see n. to 1080 and III 250 *postremis datur ossibus*: Cic. l. l. uses *recte* and *ad lineam* to express the same thing: VI 689 *rectis ita faucibus eicit alte*; IV 550 *rectoque foras emittimus ore*: Aen. VI 900 *recto litore*, and VIII 57 *recto flumine*: in the sentent. Minuc. corp. inscr. I 199 *sursum rivo recto, inde recto rivo, sursumvorsum iugo recto, susum iugo recto, sursum iugo recto* (six times), *iugo recto, deorsum iugo recto, dorsum iugo recto* are all found: Plaut. Bacch. 711 *Recta porta*; Ter. Ad. 574 and 582 *hac recta platea*; Livy VII 15 5 and XXXVIII 20 8 *obliquo monte*; IX 35 7 *per obliqua campi*; Ov. met. V 132 *in obliquo inguine*; Stat. silv. I 3 66 *per obliquum amnem*; [Val. Flacc. I 484 *per obliqui...conpendia montis.*] **218** foll. see N. P. Howard Journ. of phil. I p. 123. *fer. pond. propr.* = *ponderibus suis ferri* of V 189 and 424; and expresses the natural gravitation downwards of the atoms by their own weight: these vss. are precisely illustrated by Cicero l. l.; and de fato 22 *qui potest pelli alia* (atomus) *ab alia, si gravitate feruntur ad perpendiculum corpora individua rectis lineis, ut Epicuro placet?*; also 23 cited in n. to 251; and 25; and de nat. I 69 *ait atomum, cum pondere et gravitate directo deorsus feratur, declinare paululum.* With *spatio* = *via*, comp. Cic. de div. I 17 *certo lapsu spatioque feruntur*; de nat. II 49 *spatiis immutabilibus ab ortu ad occasum commeans*; and with *se dep. spatio*, Horace's *recto depellere cursu*; Quintilian's *recta via*, and *recto itinere depulsus.* The *se depellere* would seem to be used, to shew that this swerving comes from their own inner impulse. *ferme*: see n. to I 14 *ferae.* **219** *paulum, Tantum quod momen mutatum d. p.* is well expressed by Cic. l. l. *perpaulum quo nihil posset fieri minus.* **220** *Tantum quod*, just and only just, is common in Cicero, but he seems to use it of time, *tantum quod..., cum* cet.: Livy XXII 2 9 *tantum, quod extaret aqua, quaerentibus*: [but just as Lucr. has *paulum, Tantum quod*, so Sen. rhet. controv. I 1 20 has *praestitisse se dixit exiguum, tantum quo spiritum posset producere.*] *momen*, which as we have said to I 435 Lucr. uses for *momentum*, here signifies the ῥοπή or inclination of the balance. **223** *Nec* cet. as expl. in what follows. The atoms would have gone on for all eternity to descend in parallel lines with equal velocities. Lucr. does not tell us whether every atom thus swerved at some time or other; nor whether an atom could thus swerve only once; and Cicero seems not to know what Epicurus taught on this point.

225—250: you must not think that the heavier can overtake the lighter atoms and so give birth to things: a heavier thing falls more quickly than a lighter through water and air, because these offer unequal resistance to unequal weights: not so with void which yields to light and heavy alike: nothing therefore can account for the first collision of atoms except this declination; which must be the least possible, that we

may not attribute to them oblique motions. **225** *potesse*: see n. to I 665. **226** *feruntur*: see n. to I 1058: yet *ferantur* may be right, as the indic. here is very harsh. [For the mood comp. Cic. Lael. 56 *ut, quanti quisque se ipse facit, tanti fiat ab amicis*: see Seyffert (Mueller) here.] **228** *reddere* in Lucr. often, as here, means simply *dare* or *edere*: 890 *vitalem reddere sensum*; Ov. met. VI 308 *nec bracchia reddere motus.* **232** *tenuis* seems to be a nomin. as I 281 *mollis.*

236 237 almost the same as I 1079 1080. **238** *quietum*: a poetical epithet implying that it can offer no resistance active or passive; *Quod manet intactum neque ab ictu fungitur hilum.* **239** comp. I 1076 and Epicurus there quoted. **240** foll.: hear Epicurus himself in Diog. X 61 ἰσοταχεῖς ἀναγκαῖον τὰς ἀτόμους εἶναι, ὅταν διὰ τοῦ κενοῦ εἰσφέρωνται μηδενὸς ἀντικόπτοντος· οὔτε γὰρ τὰ βαρέα θᾶττον οἰσθήσεται τῶν μικρῶν καὶ κούφων, ὅταν γε δὴ μηδὲν ἀπαντᾷ αὐτοῖς· οὔτε τὰ μικρὰ τῶν μεγάλων, πάντα πόρον σύμμετρον ἔχοντα, ὅταν μηθὲν μηδ᾽ ἐκείνοις ἀντικόπτῃ. **244** *minimum*: so Cic. de fato 22 *tertius quidam motus oritur extra pondus et plagam, cum declinat atomus intervallo minimo, id appellat* ἐλάχιστον. The use of *minimum* or ἐλάχιστον here is quite analogous to that so fully discussed I 599 foll.: as there Lucr. and Epicurus spoke of the part of an atom as an absolute least, a thing the least possible, so small that it could not exist alone, and could not therefore be looked upon as an individual thing; so here this motion of declination is so small, as not to admit of having the distinctive term 'slanting' applied to it: he thus hopes to escape the necessity of asserting that atoms can of themselves move obliquely. **248** *quod* = *quoad* or *quantum*: see Lach. to V 1033: so *quod commodo tuo fiat, quod potero, quod potes, quod poteris, quod licebit, quod commodo tuo facere poteris, quod sine molestia tua facere poteris, quod adhuc coniectura provideri possit, nusquam quod sciam, non ero quod sciam, quod commodo reipublicae facere posset, quod sine iactura reipublicae fieri posset* in Cicero Terence Plautus Caesar Livy respectively. **249** *recta regione* seems unquestionably right; I cannot understand Lachmann's objections: IV 1272 *recta regione viaque*; 514 *rectis regionibus exit*; Livy XXI 31 9 *non recta regione iter instituit, sed ad laevam...flexit*; Cic. Verr. V 176 *si qui tantulum de recta regione deflexerit*; and 181 *haec eadem est nostrae rationis regio et via*; Caes. de bell. Gall. VII 46 1 *oppidi murus ab planitie...recta regione, si nullus amfractus intercederet, MCC passus aberat*; [VI 25 2 *rectaque fluminis Danuvii regione pertinet ad* cet., *hinc se flectit sinistrorsum diversis ab flumine regionibus*:] in the sentent. Minuc. corp. inscr. I 199 *recta regione*, 'in a direct line,' twice occurs. **250** *sese* is harsh thus separated from *declinare*; but I now think it is what Lucr. wrote; as he has many such collocations of words, sometimes in order to produce a peculiar effect, sometimes from pure indifference: see the instances in n. to III 843 *Et si iam nostro sentit*; and comp. III 916 *Tamquam in*

morte mali cum primis hoc sit eorum; 196 *Namque papaveris aura potest suspensa levisque Cogere ut ab summo tibi diffluat altus acervus*, to bring into relief the *papaveris*; v 65 *Ut mihi mortali consistere corpore mundum Nativomque simul ratio reddunda sit esse*: 572 *Forma quoque hinc solis debet filumque videri, Nil adeo ut possis plus aut minus addere, vere*, is very similar to our passage.

251—293: again if there is no such declination of atoms to break the eternal sameness of their motions, the perpetual sequence of cause and effect, whence have all living things freewill? whence can we change our motions at pleasure? thus horses cannot start in a race at once: motion has to spread from the heart through the limbs: thus too when we are carried along by an external force, there is something in us which resists, and enables us sometimes to stop: while the weight then of atoms enables *them* sometimes to withstand the external force of blows, it is only this declination of atoms at quite uncertain times and places which gives the mind its freedom of action. **251** foll. Cic. de fato 23 states this as the chief motive with Epicurus for devising this *tertius quidam motus extra pondus et plagam*: *hanc Epicurus rationem induxit ob eam rem, quod veritus est ne, si semper atomus gravitate ferretur naturali ac necessaria, nihil liberum nobis esset, cum ita moveretur animus ut atomorum motu cogeretur*; and Epic. himself in Diog. x 134 *ἐπεὶ καὶ κρεῖττον ἦν τῷ περὶ θεῶν μύθῳ κατακολουθεῖν ἢ τῇ τῶν φυσικῶν εἱμαρμένῃ δουλεύειν·...ἡ δ' ἀπαραίτητον ἔχει τὴν ἀνάγκην.* **252** *ordine certo*, i.e. if they move straight down by inherent gravity and only change their motion by *plagae*, or collision with other atoms. **258** *progredimur* we men for instance among other living beings. Epicurus always passionately maintained the doctrine of freewill in opposition to the everlasting necessity of Democritus as well as most of the stoics, *τῆς αἰδίου κινήσεως μηχανώμενος ἐλευθερῶσαι καὶ ἀπολῦσαι τὸ ἑκούσιον, ὑπὲρ τοῦ μὴ καταλιπεῖν ἀνέγκλητον τὴν κακίαν*, says Plut. de repug. stoic. 34, p. 1050 C. **262** *rigantur*, spread over the body like so many *rivi*: comp. iv 907 *somnus per membra quietem Inriget* with Furius in Macr. sat. vi 1 44 *mitemque rigat per pectora somnum*: Aetna 385 *quaecumque rigant incendia silvae.* **263** *Nonne vides* cet. has suggested his simile to Virgil, geor. iii 103 *Nonne vides, cum...ruuntque effusi carcere currus* cet. *tempore puncto*: a favourite phrase of his: vi 230 *puncto in tempore*: it = puncto temporis, i.e. while the smallest point of time is pricked down or marked. **265** *de subito* recurs iii 643. **267** *conquiri* i.e. be sought out and brought into communication one part with the other. **269** *corde* the seat of the *animus*. **270** *id* seems to refer to the preceding v.: *creatum hunc initum motus*: comp. *id* in Plaut. aul. 8, 10 and 265: then perhaps *motum* alone is the subject of *dari*. **271** *Inde...porro*: Wak. compares Aen. v 600 *hinc maxima porro Accepit Roma*: i 461 *porro deinde*

seems different; see n. there. *totum corpus et artus*: he has many such pleonasms; though this might be explained 'through the body generally and each of its parts': so 282 *per membra per artus*; iv 887 *quae in corpore toto Per membra atque artus animai dissita vis est*; 1042 *Per membra atque artus decedit corpore toto*: vi 797 *membra per artus Solvunt*; 945 *per omnia membra, per artus.* **272** *similest ut cum* seems like *similis ut si qui, tamquam si, quasi*, which occur in Cicero: Pomponius 74 *Simile est quasi cum fulgit*; [Plaut. epid. 621 *Est consimilis quasi cum* cet.] *ictu* depends on *impulsi.* **285** foll. see Cic. de fato quoted at 251: the passage tallies exactly with this; *pondus* and *plaga* denote there, as here, the natural and the impressed motion of atoms. **288** foll. Lucr. too, like Cicero l. l., assigns the freedom of the will as the chief proof of the necessity of this third motion: the natural gravity of atoms gives them, says Lucr., a certain independence and power of resisting extraneous force; but the mind itself can only escape from inexorable necessity and acquire freedom of action by this fitful declination of atoms. **289** *necessum est* is used several times by Lucr. as well as by Plautus and Livy: but Lach. to vi 815 justly observes that *necessum* used as it is here with an epithet is singular enough. **291** *ferre patique*: so Mart. xii 26 8: Livy x 11 12 *ferre ac pati.* v 314 *perferre patique*, which Horace uses more than once, and Martial vii 39 3; Terence has *perferre ac pati*, Cicero *patietur perferet* and the like, [Servius Sulpicius ap. Cic. epist. iv 5 3 *haec sufferre et perpeti.*] **292** *clinamen*: see n. to i 435 and 653; it = *declinatio* or *inclinatio.*

This theory has naturally enough drawn down on Epicurus the scoffs of his many adversaries: res tota ficta pueriliter, says Cicero: the whole business is contradiction and ridiculous nonsense, echoes Bentley in his Boyle lectures. Even his friends have mostly here deserted him: Marullus, one of the most enthusiastic of them, writes in the margin of Mon. 'absurditas' 'insania'. Yet there is something grand and poetical in its very simplicity. He wished, like other thinkers, to derive his system from as few first principles as possible: he saw in mind his atoms descending from all eternity in uniform blind motion. How then was existence possible? a sentient first cause was to him inconceivable. This *minimum* of declination then, this *perpaulum quo nihil posset esse minus*, rose before his reason and imagination, as the simplest theory which would solve the great problem of being, of the creation of this and all other worlds with all that is in them. What system-monger but somewhere or other reaches a point where reason must be silent or self-contradictory? In a curious memoir of the Berlin transactions for 1782 by G. L. Le Sage, called Lucrèce Neutonien, the author ingeniously argues that if Epicurus had had but a part of the geometrical knowledge of say his contemporary Euclid, and conceptions of cosmography the same as

those of many then living, he might have discovered the laws of universal gravity, and not only the laws, but, what was the despair of Newton, its mechanical cause. Had he supposed the earth to be spherical and made his atoms move in directions perpendicular to the surface of a sphere, that is towards its centre, he might not only have proved the law of the inverse square of the distance, but have demonstrated the cause of that law. But the truth is Epicurus might probably have left his worlds to shift for themselves and let eternal time past take the place of a first cause, if he had not wanted this theory mainly as we have said to explain the great mystery of freewill: he wished to mark this as one of the cardinal points of difference between himself and Democritus whom Cicero praises for choosing to accept fate and necessity rather than have recourse to such a doctrine as this of Epicurus. It is for this reason that Lucr. dwells at such length and with such emphasis on this part of the question; out of respect for Democritus as well as opposition to the stoics. See N. British Review l. l. p. 223 'it is a principle of mechanics that a force acting at right angles to the direction in which a body is moving does no work, although it may continually and continuously alter the direction in which the body moves...It is clear to us that Epicurus, when he devised his doctrine of a little swerving from the straight path of an atom, had an imperfect perception of this mechanical doctrine ...We can see that their conception was not stupid, it was simply false, as all physical explanations of the origin of energy and matter must be'.

294—307: the matter of the whole universe never was either more or less condensed than it is now: the motions which first-beginnings now have, they always have had and will have: what they have produced, they will again produce: the sum of things no force can change; for no new matter can escape out of the universe nor come into it and change the order of nature. **294** foll. as his atoms are eternal, it is an axiom that none can come into being or go out of being: the sum of matter therefore must ever be the same. **296** *adaugescit*: in the use of this word Cic. prognost. frag. 3 has preceded him. **297** *in motu...in eodem*: see n. to I 999. **300** *quae consuerint* i.e. ea quae, such things as: the subj. is quite in place, though Lamb. objects to it. **301** *Condicione*: this spelling is now incontrovertibly fixed by reason and authority; *cond.* is related to *condicere*, as *dicio* to *dicere*: the latter point is proved by Cicero himself de leg. agrar. II 39, where he puts together *dicioni iudicio*, and then clearly implies that *dicere* is to *dicio* what *iudicare* is to *iudicium*. **305** *quicquam est extra*: comp. V 361 *summarum summa est aeterna neque extra Qui locus est quo dissiliant neque corpora sunt quae Possint incidere*, and I 963 *extra summam quoniam nil esse fatendum.* Epicurus in Diog. Laer. X 39 says more generally τὸ πᾶν ἀεὶ τοιοῦτον ἦν οἷον νῦν ἐστὶ καὶ ἀεὶ τοιοῦτον ἔσται· οὐθὲν γάρ ἐστιν εἰς ὃ μεταβάλλει, παρὰ γὰρ τὸ πᾶν οὐθέν ἐστιν ὃ ἂν εἰσελθὸν εἰς αὐτὸ τὴν μεταβολὴν

ποιήσαιτο. With this paragraph comp. N. British Review l. l. p. 225 'this proposition foreshadows the doctrine of conservation of energy. It is coupled with the assertion that the sum of matter was never denser or rarer than it now is, a proposition which we may admit in the sense that the mean density of the universe is constant...It is clear in all his work that Lucr. conceived two things as quite constant: atoms were neither created nor destroyed, and their motion could neither be created nor destroyed. He believed that each atom kept its velocity unaltered. The modern doctrine is that the total energy of the universe is constant, but may be variously distributed, and is possibly due to motion alone ultimately, though this last point has not been proved'. The amount of motion in the παλμός or oscillation of the atoms forming a lump of iron or of granite is precisely the same as that of the motion of these same atoms racing alone down space.

308—332: though atoms are in constant motion, yet the whole universe appears to be at rest, because they are far beneath the ken of our senses: nay visible things often when seen from a distance seem to be at rest; as a flock of sheep feeding; or as an army of foot and horse, if looked down upon from a height. **309** *sint in motu*: an unusual rhythm; but *in motu* is to be taken metrically as one word; so always *inter se*; *inter nos* and the like. **310** *Summa...summa*: the play on words which he so loves. **311** *dat motus* = movetur; see n. to I 819: either the sun or moon or the clouds or any thing moving on the earth is an instance of such partial motion. **312** *infra* is here the adv.: *iacet infra longe a n. s.*: IV 112 the prepos. is used with the same force: *primordia.. Sunt infra nostros sensus.* **313** *Primorum*: IV 186 *e primis facta minutis*: see n. to I 55. **314** *iam*: it has precisely the same force I 601: *quod nostri cernere sensus Iam nequeunt*: where see n.: and 613 and 625. *surpere*: Horace and Plautus also use this contracted form. **316** *diducta* i.e. from us. **318** *reptant* well expresses the slow regular advance of sheep as they are feeding. **319** comp. V 461 *gemmantis rore per herbas*; culex 69 *gemmantis.. per herbas*; but there of flowers. **320** *coruscant*: Iuven. XII 6 uses it actively, *frontemque coruscat*; Quintil. inst. VIII 3 21 *caput opponis cum eo coruscans* (Halm, *conificans* mss.). **323** foll. comp. 40 foll. **324** *bel. sim. ci.*: see n. to 41. **324** foll. Lucr. had more than one passage of Homer in his mind: Od. ξ 267 πλῆτο δὲ πᾶν πεδίον πεζῶν τε καὶ ἵππων Χαλκοῦ τε στεροπῆς, Il. T 362 Αἴγλη δ' οὐρανὸν ἷκε, γέλασσε δὲ πᾶσα περὶ χθὼν Χαλκοῦ ὑπὸ στεροπῆς· ὑπὸ δὲ κτύπος ὤρνυτο ποσσὶν Ἀνδρῶν, and B 457 and 465. **326** *Aere ren.*: Virg. geor. II 281 *fluctuat omnis Aere renidenti tellus.* *supter* appears to be an adv.; for it would be harsh to join it with *pedibus*; and so I presume Lucr. understood ὑπό in Il. B 465 and T 363. **328** *sid. mun.*: see n. to I 788. **332** *consist. ful.* i.e. videntur consistere velut fulgor: comp. 322. Martha, p. 288, well remarks that 'such

comparisons are not mere embellishments: they are facts, examples, to illustrate the law: they place before the eyes what otherwise the mind would have difficulty in seizing'.

333—380: know too that these first-beginnings are of many different shapes: thus no two men or other animals are quite alike; thus a cow knows its calf among all other calves; thus kids and lambs run each to its own mother; thus every grain of corn, every shell is distinct. **333** *cunct. ex. rer.* = primordia rerum, the *cunctarum* being equivalent to *prima*. **335** *multigenis* appears to be a ἅπαξ λεγόμ.: it must come from *multigena*, as the *omnigenum* of Virgil from *omnigena*: see n. to I 683: Lucr. has *alienigena terrigena Graiiugena Troiiugena*; but *caecigeni*. **336 337** recur 723 724, and partially 692 694. **336** *Non quo .. sint, Sed quia non constant*: this is the regular constr.: *non quo, non quod, non quia, non quin*, followed by *sed quia, sed quod*, or *sed* or *verum* alone, take a subj. in the first, an indic. in the 2nd clause: VI 71 *non quo violari summa deum vis Possit .. Sed quia tute .. Constitues .. Nec .. adibis*; Cic. de orat. II 305 *non quo libenter male audiam, sed quia causam non libenter relinquo*; so Tusc. disp. II 56 *non quod, sed quia*; Sall. Cat. 35 3 *non quia, sed quod*; Livy XXXVIII 33 11 *non quia salvos vellet, sed quia perire causa indicta nolebat*; Cic. ad Att. VII 26 2 *non quin, sed quia*: Ser. Sulpic. ap. Cic. ad fam. IV 5 1 *non quo ea te fugere existimem, sed quod forsitan dolore impeditus minus ea perspicias*, the *perspicias* depends on *forsitan*. Lachmann's *constent* seems therefore not easy to defend. [However Cic. epist. IV 7 1 mss. give *sed quod iudicem*, editors *iudico*.] With *non quia* the best writers sometimes have an indic. in the first clause: 3 *Non quia vexari quemquamst iucunda voluptas*: so Cic. pro Planc. 78; Livy X 41 12. *parum multa* recurs several times: it and *parum saepe* are similarly used by Cicero: instead of being few, the atoms of each shape are infinite in number, as he soon after proves. **340** *prorsum* seems best taken with *omnia*; as VI 528 *omnia, prorsum Omnia*; but it may be taken with *non* in the sense of *prorsum non*: see n. to I 748; though the other sense agrees best with *quaedam* of 380. **341** *filo*: *filum* is properly thickness, as IV 88 *suptili praedita filo*; hence size as here, and V 572, 581, 589; see Lach. to V 571. **342** *Praeter eat*: IV 388 *ea praeter creditur ire*: let them pass before you in review, and then 347 *sumere perge* out of the number any of them for inspection, and you will find they differ. *Praeter eat*, which I have divided for emphasis, was suggested to me by Hor. sat. I 4 25 *quemvis media elige turba, Aut ob avaritiam aut misera ambitione laborat.* [And so *transeo* is used by Sen. rhet. controv. I 4 12 *quam otiosi, quam securi adulteri transierunt praeter oculos meos.*] The metaph. is perhaps from the *sollemnis transvectio* of the knights for inspection: comp. Ov. trist. II 89 *vitamque meam moresque probabas Illo, quem dederas, praetereuntis equo*; 541 *cum te delicta notantem Praeterii totiens .. eques.* *mutaeque natantes*: see

n. to I 258. **343** Plaut. rud. 942 *sine squamoso pecu.* **344** comp. Aen. VII 32; and Ov. met. II 252. As *laeto* in the old writers (see Forc.) signifies to make glad, it seems best to take *laetantia* to mean making glad; it may however be synon. with *laeta*; as Cic. de nat. deor. I 116 *quae sua voluptate laetans.* **346** comp. 145. **347** *generatim* = 372 *Quique suo genere.* [*sumere* = eligere: see Lucil. XIX 10 *Sume diem qui est visu' tibi pulcherrimus unus*, and Nonius s. v.] **348** *tamen* of course refers to the *quidvis*: comp. 371 *quodvis .. tamen.* **351** *cluere* = esse. **352** *delubra* seems here to have its primary sense, the inner part of the temple where the statue of the god was, and the *arae* therefore to be within the temple. **353** *Tur. ar.*: Aen. IV 453 *turicremis cum dona imponeret aris.* **354** comp. Aen. IX 414 *vomens calidum de pectore flumen.* **355—359** imitated by Ov. fasti IV 459 460, 463 464, 481: *Ut vitulo mugit sua mater ab ubere rapto Et quaerit fetus per nemus omne suos... Inde puellaris nacta est vestigia plantae Et pressam noto pondere vidit humum*: (this v. shews that Ovid read *noscit* in Lucr.): *Quacumque ingreditur miseris loca cuncta querellis Implet.* **359** *absistens*: the cow searches for her calf, cannot find it, desists from the search, stands and lows piteously, returns to her stall, goes out again, does the same and returns once more: this, which is so near the ms. reading, seems to me to suit the sense exactly. *revisit Ad*: V 636 *ad hanc quia signa revisunt*; VI 1239 *visere ad aegros*: the constr. is common in the older writers. **360** *perfixa* seems a word peculiar to Lucr.: comp. III 305; VI 392. **361** foll. seem to have suggested to Virgil geor. III 520 *Non umbrae* cet. **362** *illa*, emphatic in a good sense; as I 82 *illa Religio*, in a bad. *sum. lab. ripis*: Hor. epod. 2 25 *Labuntur altis interim ripis aquae*; od. I 2 18 *vagus et sinistra Labitur ripa*; Ovid am. II 17 31 *Sed neque diversi ripa labuntur eadem.* **363** *subitam* is the participle: perhaps it is regular and *subeo curam* is said as *subeo dolorem* in Cicero and the like; but I think it better to take it to be *curam quae subiit*. This use of the pass. partic. is common in Latin: *potus pransus cenatus iuratus cretus concretus placitus nuptus adultus* and many such are found in all periods of the language; *senectus* is used by Lucr. more than once; see n. to III 772. But there are other words which have a more immediate bearing on our passage: Lucr. himself in VI 491 has *inpensa* for 'quae inpendent' and Sen. Herc. Oet. 1592 says *impensum ferrum*; Prisc. inst. IX 48 foll. gives a list of such words: of compounds of *eo* we find Laevius saying *miserulo obito*; Claud. Quadr. *multis utrimque interitis*; then *praeteritus* for 'qui praeteriit' was common at all times: [Lucil. XXVI 49 *flacitam familiam*;] Paulus Festi p. 28 'ad *exitam* aetatem, ad ultimam aetatem', where *exitam* seems to be 'quae exiit': similarly Caelius ap. Prisc. has *custodibus discessis*; and the young Cicero, ad fam. XVI 21 2, writes to Tiro (patre non probante perhaps) *cum omnia mea causa velles mihi successa*:

Vitruv. v 8 *scaenam recessiorem*: *occasus sol* is likewise not unfrequent. Some of these expressions were always in use, some became archaic and homely; but Lucr. was no ways averse to the latter kind: see n. to 156 *Officiuntur*. On the analogy then of *obitus interitus exitus praeteritus, discessus successus recessior*, and Plautus' *puppis pereunda est probe*, Lucr. may surely have said *subitam curam* for 'curam quae subiit'. **365** *derivare animum*: it would not be easy perhaps to find an exact parallel to this expression. *cur. lev.*: Hor. sat. II 5 99 *curaque levarit*; Ov. met. v 500 *curaque levata . . eris*. **369** *Balantum pecudes* after Ennius ann. 192: VI 1132 *pigris balantibus*: comp. *corpora pennipotentum*: *squamigerum pecudes* and the like. **370** *fere*: see n. to I 14 *ferae* (*fere*). **371** comp. 347: here also *tamen* answers to *quodvis*; for *quodvis* is emphatic as in Cic. de inv. I 100 *nam ex iis rebus* . . quaevis *amplificationes et indignationes nasci possunt*; Caes. bel. Gall. IV 2 *ad* quemvis *numerum ephippiatorum equitum quamvis pauci adire audent*. Corn of whatever kind you choose to take you will yet find not to be all alike: *non tamen* is used exactly as in v 920 *quia quae de terris nunc quoque abundant Herbarum genera ac fruges arbustaque laeta Non tamen inter se possunt complexa teneri*: comp. too IV 952 *poplitesque cubanti Saepe tamen summittuntur*. **372** *Quique* is abl. of course: see Lach. and Madv. de fin. v 46: and comp. Livy III 22 6 *equites item suae cuique parti...collocat*; XXIV 3 5 *separatimque greges sui cuiusque generis*; XXV 17 5 *motibusque armorum et corporum suae cuique genti assuetis*; Plaut. Poen. v 4 5 *copia venustatum in suo quique* (*quicque* A) *sita munde*. **375** *mollibus* of the waves falling gently on the shore; not a general epithet of water, as I 281 *mollis aquae natura*: comp. Aen. IX 817 *ac mollibus extulit undis*. **377** *Quare* cet. proves, if proof were wanting, that *Praeterea* in 242 cannot be right: it draws the conclusion from all the instances given above beginning with 342; and it would be ludicrous to include what precedes, that is, to assert 'therefore it follows that atoms must have different shapes, because I have declared that they must not all have the same shapes'.

381—397: thus the fire of lightning can pass where earthly fire cannot, because it is formed of finer atoms: for like reasons light passes through horn, rain does not; wine runs easily, oil slowly through a strainer, because the elements of oil are larger or more hooked, and so cannot separate so readily. **381** *exsolvere*: v 773 *resolvi* is also used metaphorically; and perhaps VI 46 where mss. have *dissolui*. **383** *fuat* recurs IV 637 and is found in Virgil, and often in Plautus. **385** *magis* may belong to *Suptilem*; but it seems better to take it with *parvis*: comp. VI 225 *Hunc tibi subtilem cum primis ignibus ignem Constituit natura minutis mobilibusque Corporibus*. *figuris* are here the atoms themselves; as 679 *varias cohibere figuras*; also 682, 685, 817, III 190, 246, VI 770, 776: see n. to I 55 foll.: so Democritus gave the name of

ἰδέαι or εἴδη, which Aristotle interprets by σχήματα, sometimes to the shapes of atoms, sometimes to the atoms themselves. **388** *cornum*, a form found in Varro Ovid Gellius and others: [see Ussing to Amph. 337.] **391** *quamvis* = quantumvis. **394** *perque pl.*: so *perplexis figuris* and *inplexis principiis*: their being *hamata* makes them also *perplicata*. **397** *cuiusque* seems to me to be used to increase the antithesis: the several elements of any oil in relation to the several openings of any particular strainer: though Bruno's conj. is ingenious.

398—407: honey and milk are pleasant to the taste, wormwood and the like nauseous; the former therefore consist of smooth, the latter of jagged atoms which tear a way into the body. **401** *Centauri*: IV 125 and Virg. geor. IV 270 have the form *centaurea*; the mss. of Pliny who often uses the word appear to give *centaurion* or *centaurium* for the nomin.: the latter is the form used here: it appears not to be extant in Greek. *absinthi, Aegi, conchyli* are similar genitives of Greek words in Lucr. *pertorquent* appears not to be found elsewhere: the nomin. is *natura* twice repeated: this is less harsh than III 558: Virg. geor. II 246 *At sapor...ora Tristia temptantum sensu torquebit amaro* or *amaror*: par. lost x 569 *With hatefullest disrelish writhed their jaws*. **402** *rutundis* AB here and elsewhere. **404** *quaĕ amara*: 617 *quĭ in oras*, IV 1061 *Nam sĭ abest*, v 7 *Nam sĭ ut*, 74 *quĭ in orbi*, VI 716 *quĭ etesiae*, 796 *sĭ odoratast*; so with monosyllables ending in *m*, 681 *sunt cum odore*, III 394 *Et quam in*, 1082 *Sed dum abest*, VI 276 *cum eo*: comp. Virgil's *An qui amant, te amice, o Alexi*; Horace's *Si me amas, cocto num adest*; Catullus' *tĕ in omnibus, dĭ ament*; *sĭ adire* of the catalecta; Lucilius' *quŏ eam*: this prosody is exceedingly common in the old scenic poets, but there the non-elision takes place always, or nearly always, in the arsis of the foot. [Lucilius in his iambics and trochees has also the old scenic usage: XXVIII 19 *Lucili, sĭ in amore*; XXVI 85 *quam in album*; XXVIII 5 *igni cum et aqua*.] With this passage and with IV 615 foll. it would be worth while to compare Theophrastus de caus. plant. VI 6; de sensu et sensil. 65 66 67; all quoted by Mullach Democr. p. 217 foll. where it is explained at length out of what kind of atoms the flavours γλυκύς, στρυφνός, ὀξύς, δριμύς, ἁλμυρός, πικρός are severally formed according to Democritus.

408—443: also what is pleasing or offensive to the other senses, to the hearing smell sight, must be formed of elements more or less smooth or rough respectively: again some bitter flavours have elements, not hooked, but slightly prominent: those of fire and cold are jagged, but in different ways as shewn by touch, every bodily sensation being a kind of touch. **408** *Omnia postr.*: passing from taste to the other senses. *tactu* is here the dat. of *tactus*; and is quite synon. with *sensibus*, as it implies in its general meaning every way in which you can *tangere et tangi*: thus *tangere* I 643 is said of hearing, II 403 of taste, IV 674 of

smell. Virgil ends geor. III 416 with *aut mala tactu*: but *tactu* there appears to be the supine. 412 *musaea*: this adj. appears peculiar to Lucr. at least in the senses in which he employs it: here it = musica; in I and IV it = simply *musarum*. *mele*: 505 *cycnea mele*; V 334 *modo organici melicos peperere sonores*. This v. is almost made up of Greek words; 505 *Et cycnea mele Phoeboeaque daedala chordis*, even more so: in both places he wishes to express sweet sounds, so far supporting Quintil. XII 10 33, 'itaque tanto est sermo Graecus Latino iucundior ut nostri poetae, quoties dulce carmen esse voluerint, illorum id nominibus exornent'. Juv. III 68 *Et ceromatico fert niceteria collo* seems to parody the practice, which Virgil and Ovid in regard to proper names and rhythms are so fond of; but which in the age of Quintilian and Juvenal was carried to an absurd extent. 413 *figurant*: IV 552 *Formaturaque labrorum pro parte figurat*, i.e. shapes the articulate words: here I presume putting the tunes into shape means to execute them. 416 *Et cum* and 420 *Et qui*: see n. to I 280. *croco Cilici*: culex 399 *Cilici crocus editus arvo*. *perfusa* in a liquid state, as described by Seneca Pliny and Martial. 419 *oculos* cet.: Tac. hist. III 31 *saevissima Vitellii vox qua se (ipsa enim verba referam)* pavisse oculos *spectata inimici morte iactavit*; Sen. epist. 58 25 *oculos...ut dici solet, pascit*. Terence has *oculos pascere*, Plautus *oculis epulas dare*, Martial *oculis comedit* and *oculis devorantibus*: comp. I 36. 421 it is not easy to see how mere ugliness or hideousness of aspect implies roughness in the atoms: one could conceive a very ugly thing having a soothing effect, if applied to the eyes; while bright and beautiful objects may often *conpungere aciem*. 423 *principiali lev.* i.e. levore principiorum: comp. 425 *materiae squalore*. 426 *quae iam nec*: the force of *iam* is clear enough; which, when you come to them, you can no longer call either smooth etc.: comp. Cic. de fin. V 14 *praetereo multos, in his...Hieronymum, quem iam cur Peripateticum appellem nescio*; Pollio ap. Cic. ad fam. X 32 3 *illa vero iam ne Caesaris quidem exemplo*; Cic. Brutus 70 *iam tamen quae non dubites pulchra dicere*; Livy V 14 3 *non prodigia, sed iam eventus*; Lucil. lib. inc. 13 Muell. *tertia iam postremaque nostra*: comp. also 313 *ubi ipsa Cernere iam nequeas*, and I 601, 613 and 625. It cannot have the meaning it has just after in 430, 431, 440, where particular instances are specified. 428 *utqui*: see n. to I 755. 429 *Titillare...sensus*: Cic. de nat. deor. I 113 *has leviores dicis voluptates quibus quasi titillatio (Epicuri enim hoc verbum est) adhibetur sensibus*; de fin. I 39 *si ea sola voluptas esset quae quasi titillaret sensus*; and other passages: Epicurus' own word γαργαλίζειν is often mentioned: he applied it to the slighter bodily pleasures. 430 *Faecula*: Hor. sat. II 8 9 *faecula Coa*: the *fecula* of AB and Lach. cannot be from Lucr. though before the end of the first century it became common to put *e* for *ae* in many words, *maereo aerumna paenitet* cet.: V 1141 A has *fecem*. 433 *tactus uterque* = tactus

utriusque: Hor. od. II 17 8 *ille dies utramque Ducet ruinam*; Livy XXXV 46 7 *nihil utilius Graeciae civitatibus esse quam utramque complecti amicitiam; ita enim ab utriusque iniuria tutae*; Cic. ad Att. XV 1 3 *se autem utraque arma metuere*; Sueton. I 6 *de eius ac patris sui utraque origine sic refert*; [Tacit. hist. I 50 *utrasque impias preces, utraque detestanda vota*.] 434 this point is put with emphasis to shew the vast importance of touch; for as nothing can *tangere et tangi sine corpore*, so nothing can *sine tactu sentire*: all the senses are but different forms of touch: he then enumerates the different ways in which the body can feel; either something enters from without, and gives pleasure or pain; or something takes place in the body, and gives pleasure or pain; or thirdly the atoms in the body itself, before quiescent, are troubled by some collision and so disturb the body's feeling, as for instance when you strike any part of the body. 438 *Aut* from the attraction probably of *aut* in 437: it should be *vel*, to answer *vel* of 435 and 436. *turbant* neut.: see n. to 126. *corpore in ipso* = merely *intus in corpore*: see n. to IV 736 *aere in ipso*.

444—477: again things hard and dense, stones, metals and the like, have hooked and branching particles; fluids have them smoothed and round: things again which do not cohere, but yet are pungent, smoke mist flame, have sharp, but not tangled elements: sea-water has particles round and smooth mixed with others round but rough which give it its saltness; and these latter by filtering you may separate from the former. 445 foll. *hamatis* cet.: Cic. acad. pr. II 121 *ille qui asperis et levibus et hamatis uncinatisque corporibus concreta haec esse dicat*: the *uncinatis* = 427 *flexis mucronibus unca*. Newton optics p. 251 Horsl. 'the parts of all homogeneal hard bodies which fully touch one another, stick together very strongly. And for explaining how this may be some have invented hooked atoms, which is begging the question'. 448 *ictus contemnere sueta*: Virg. geor. II 360 *contemnere ventos Adsuescant*: for the sense comp. Pliny XXXVII 57 *incudibus hi* (adamantes) *deprehenduntur ita respuentes ictus ut ferrum utrimque dissultet, incudes ipsae etiam dissiliant; quippe duritia inenarrabilis est...unde et nomen interpretatione Graeca indomita vis accepit*. 449 *silices*: see n. to I 571: these blocks paving their streets and roads would always be present to the eyes and minds of Romans. *robora*: see n. to I 882. 450 *Aera, claustris, restantia* are all vague words; so that their joint meaning must be somewhat doubtful: *Aera* I take to be the bronze bars or bolts of a gate; *claustra* the staples or metal boxes into which the bolts went to fasten the gate; apparently the strict meaning of the word: 'massy staples And corresponsive and fulfilling bolts': but German. 196 197, compared with the original of Aratus 192 193, is obscure to me both as to reading and sense. *restantia* then = resistentia, as I 110: *rest. cl.* meaning struggling with, refusing to part from: [Baehrens in Rh. Mus. XXIX p. 360

seems rightly to amend Lucil. XXIX 47 *Caede ostium, Gnato, urge!*—restat. —*periimus.* (*urguent, instant* Muell.)] Yet *claustris* might be the modal abl.: most of the editors seem to take *aera* for the *cardo*; but as the ancient *cardo* had nothing in common with the modern hinge, *claustris* must then apparently mean the socket of the door-flap which moved about the *aera* or pivot of the *postis*: this it can scarcely do. In ordinary doors the *aera* would be the *pessuli*, one of which went into a *claustrum* in the upper limen or lintel, the other into one in the lower. Hence each doorflap or *valva* had two, one above one below: Plaut. aulul. I 2 25 *occlude sis Fores ambobus pessulis*: the *sera* being the wooden bar which went across the whole door into a hole in each *postis*. **452** *flŭvido*: **464** *flūvida*, **466** *flūvidus*. *līquida*: so I 349, III 427; IV 1259 *līquidis et līquida crassis*; where see note: *līquida* Laevius frag. 7 Mueller; even Phaedrus has *līquidus*. I 453 *līquor aquai*; the only case where the subst. is long, though that is the regular quantity of the verb. **454** *glomeramina*: this word, almost peculiar to Lucr., V 726 means the ball of the moon; II 686 atoms of different shapes meet *glomeramen in unum*: from the context *glomeramina* would seem in our passage to mean *globosa primordia*, the round particles of any liquid; but if so, this sense is in strange contradiction to the meaning which Lucr. elsewhere gives to it: if it means the drops into which a liquid sometimes forms, that would only apply to a few cases in which a liquid so disperses itself: the words *retinentur inter se* are ambiguous, as they may refer either to a composite body keeping together, or to the separate atoms holding themselves in union. **455** *proclive*: see Cic. de fin. V 84 *proclivi currit oratio*, and Madvig there who shews that *proclivi* and *proclive* are the same in meaning and used adverbially: he compares *facile* and *sublime*, and refers to Gellius X 24 who says the ancients used *proclive* and *proclivi* indifferently: Cic. Tusc. disp. IV 42 *quia sunt in lubrico incitataque semel proclivi labuntur*. **460** *vesca*: see n. to I 326: *pen. ves.* to enter in with a biting power well suits the context. **462** *sedatum* I keep: a thing, like smoke for instance, enters the eyes and bites them; but its atoms disperse at once, and thus the sense is able to quell and allay them: comp. the use of *sedare* in 956: the remaining motions can often *Vincere et ingentis plagae sedare tumultus*: comp. too the *longa dies sedarit vulnera mentis* of Ovid ex Ponto IV 11 19; and the uses of *sedat* in Pliny XX 211; 212; and XXIX 133: [comp. too Cic. Cat. III 6 *tum interventu Pomptini atque Flacci pugna quae erat commissa sedatur*: see too Nizolius: also Amm. Marc. XIV 6 23 *et quoniam apud eos ut in capite mundi morborum acerbitates celsius dominantur, ad quos vel sedandos omnis professio medendi torpescit* cet.] The ms. reading is thus unaltered, while the corrections of Lach. Bern. and others are very violent. **463** *acutis*: so that they can *pungere*, but not *haerere*. **465** *Sudor maris* is simply the salt water

of the sea, and has nothing in common with V 487, where *salsus sudor* is literally the sweat of the earth; or with what is there quoted from Empedocles. [*habeto*: see Seyffert, Lael. p. 48, on *sic habetote*.] **467** *doloris* is the acc. plur.: it is certain that *doloris laboris maioris* and the like were often, if not generally, written by Lucr. and Virgil: see 509 *melioris* and V 591, and Wagner orthogr. Verg. p. 404: *creant doloris*= 470 *laedere sensus*. **469** *Scilicet esse*: see n. to I 210 *Esse videlicet*. **472** *Neptuni*: he takes himself the licence here, which 652 (655) he somewhat contemptuously concedes to others. [**474** for arrangement of words comp. VI 140; Plaut. asin. 230 and Ussing there.] **475** *mansuescat*: i.e. by losing the *aspera semina*. **476** *viri*: *virus* is used for the brine of the sea I 719, V 269, repeated VI 635, *Percolatur enim virus*; Manil. V 684 *ponti secernere virus*.

478—521: hence it appears that the number of different shapes in atoms is finite: some atoms must be infinitely large, if you have an infinite variety of shapes; for say certain atoms consist of three parts or four parts: their permutations will only give a certain number of shapes; go on increasing the number of parts, the shapes after every change of position will still be only finite in number: hence to get an infinite number of shapes, some atoms must be infinitely large; which is impossible: again were the shapes infinite, what is now best in colour smell flavour sound would be far surpassed; as well as what is worst: but as it is there is a limit to all this; there is a limit too to the heat and cold of the year.—This was another point in which Epicurus differed from Democritus and Leucippus who according to Arist. de gen. et corr. I 1 p. 314 a 22 taught that their atoms ἄπειρα καὶ τὸ πλῆθος εἶναι καὶ τὰς μορφάς: p. 315 b 9 foll. he gives their reasons for this. Philoponus in his comment p. 3 b on the words of Aristotle just quoted records that according to Alexander of Aphrodisias the epicureans on this point οὐκέτι συνεφώνησαν Δημοκρίτῳ: this Epicurus himself in Diog. X 42 distinctly confirms, καὶ καθ' ἑκάστην δὲ σχημάτισιν ἁπλῶς ἄπειροί εἰσιν ἄτομοι, ταῖς δὲ διαφοραῖς οὐκ ἁπλῶς ἄπειροι ἀλλὰ μόνον ἀπερίληπτοι: the number of shapes is not infinite, only inconceivably great: this careful limitation is added no doubt with reference to Democritus. Lucr. simply states and argues that the number is finite, without deciding whether it is large or small. **479** *Ex hoc* cet.: it derives its proof from what has been said, because though there is so much difference in things in regard to hardness softness, smoothness roughness, and the like, yet these differences are only finite: see 500 foll. **480** = 514 *finitis differre figuris*. **481** *rursum iam* refers to I 615: it will once more follow, though it was there proved to be impossible: see below 499 *supra quod iam* cet. **483** my correction is I think very simple: *in eodem* i. e. semine: then defining more strictly, 'I mean in the one small size of any single atom': because his argument obliges him to begin with the

smaller and go on to the larger: the *eodem* would infallibly be changed into *eadem* by the context: in Lucil. XXIX 79, if Mueller is right in reading *Eodem una* (*uno* mss.) *hic modo*, the case is exactly parallel. As Lach. says, *eadem una* would hardly have the meaning of *una et eadem.* In the Journ. of phil. IV p. 123 124 I argued for *Namque eadem minima* (eadem in una, in eadem una); but my present reading is much simpler. **484, 487** and **490** *corporis* is of course the atom: see n. to I 600 *Corporis illius.* Lucr. seldom has to speak of a single atom: when he does mention one, he has hardly any word for it but *corpus* as here. **485** *minimis e partibus*: this has been fully explained I 599 foll.: these *minimae partes*, which could not exist alone and had no distinctive qualities, Lucr. seems to have regarded as each perfectly identical; so that the atom took its shape and character solely from the mode of juxta-position in which these existed from everlasting in the atom; and three he seems to have thought the very smallest number that could compose one of his atoms. **490** *Formai speciem*: comp. IV 69 *formai figuram.* **491** *Quod superest*: see n. to I 50. **492** *Addendum partis*: see n. to I 111: the permutations will soon come to an end and to increase the shapes new parts must be added. **494** *etiam*, once again, still, which the comic poets shew to have been an idiomatical use: Cic. Verr. III 175 *dic, dic etiam clarius.* **496** *Subsequitur*, at once follows upon. **498** *maximitate*: see n. to I 653. **499** *supra* i. e. I 615 foll. With what precedes comp. Epicurus himself in Diog. X 56 πᾶν δὲ μέγεθος ὑπάρχον οὔτε χρήσιμόν ἐστι πρὸς τὰς τῶν ποιοτήτων διαφοράς, ἀφῖχθαί τε μέλλει καὶ πρὸς ἡμᾶς ὁρατὴ ἄτομος...πρὸς δὲ τούτοις οὐ δεῖ νομίζειν ἐν τῷ ὡρισμένῳ σώματι ἀπείρους ὄγκους εἶναι οὐδ' ὁπηλικουσοῦν.

500 *Meliboea*: Lucr. tells us that this was the Thessalian town: it lay on the shore, between Ossa and Pelion: Aen. V 251 *Purpura Maeandro duplici Meliboea cucurrit*; where Conington says '*Meliboeus* is formed from it as an adj. by poetical licence, as III 401 *ducis Meliboei*'. **501** *Thessalico conc. col.*: see n. to I 474. Philostr. heroica 744 proves that the Thessalians were known for dyeing with purple from the κόχλος. *tacta*: Lucr. uses *contingo* and *contactus* in the same sense. Oudendorp on Lucan X 491 among several false instances quotes II 536 *tetigit sanguis pollutos Caesaris enses.* **502** *ridenti*: IV 1125 *pulchra in pedibus Sicyonia rident.* **504** *iacerent* of course is continued to this verse: Lucr. assumes according to wont that where the varieties are infinite there must be infinitely good and infinitely bad in what they produce. **505** Lamb. seems to be right in taking *Phoebea* to imply tunes played on the φόρμιγξ, the instrument of Phoebus. *daedala chordis* appears to be the same as 412 *per chordas organici quae...figurant*: both phrases seem to imply the giving expression on the strings to all the varied forms of the music. **509** *in melioris* depends in grammar on *cedere retro*, in

sense on *progredi* or the like. **513** and **518** *summam* i. e. the whole range within which they move. **515** Lachmann's *iter usque* is tame and I should like to read *hiemum usque*; yet with Lach. I think *Finitumst* and *remensumst* harsh without a subject; though scarcely so harsh perhaps as IV 813 *semotum fuerit longeque remotum.* **516** *remensus* is more than once passive in Virgil. **517** *Omnis* cet. is rightly explained by N. P. Howard Journal of phil. I p. 126. The fires of midsummer and the frosts of winter are the two extremes, between which lies every degree of *calor, frigus* and *medii tepores.* **518** *Interutrasque* is to be kept here, and V 472 476 839 VI 362 1062, as I suggested in notes 1 of my second edition, comparing the adverbs *alias alteras* or else *foras*: Buecheler Lat. decl. p. 32 cites Nonius p. 183 for *utrasque*, which in Cassius Hemina signifies 'both times', in Caecilius 'on both sides'. The origin of these forms is nowise clear, as is the case with many other adverbs in Latin. **520** *mucroni*: the metaphor must be from the *mucro* or point of the *stilus* setting a mark at each end of any length you wish to note: on the *i* of the abl. see n. to I 978. **521** *infesta*: Mela I 4 *mediam aestus infestat, frigus ultimas*; III 44 *tellus infesta frigoribus.*

522—568: the number of shapes being finite, the number of atoms of each shape is infinite, since it was proved in the first book that the sum of matter was infinite: if you say some animals are more scarce than would be the case, if the atoms of which they were made were infinite, I answer these animals may be very numerous in remote regions; but even if but one thing of its kind existed in the whole world, this would imply an infinite sum of atoms; else how could these have met and united in the boundless ocean of matter? the first-beginnings therefore of every shape and kind are infinite in number. **522** foll. see Epicurus cited to 478 foll. who precisely agrees with Lucr. **525** *cluere* = esse. *etenim* cet. for no finite number multiplied by any finite number however large can produce an infinite sum. And as Epicurus and Lucr. conceived all infinites to be equal, the atoms of each shape must to them have been equal to the sum of all the atoms of all shapes; which seems absurd; but this opinion they shared with all the ancients, and moderns till comparatively recent times: Philoponus, l. l. to the last section, has a curious argument to shew that Democritus holding the atoms of each shape to be infinite must have held that there was τοῦ ἀπείρου ἀπειρότερόν τι, and that the epicureans teaching that the number in each shape was infinite must have believed the same: this to him seemed an absurdity; and it must have puzzled Epicurus and Lucr. as well. Newton cited to I 622 clears up the mystery. **528** *probavi* I 1008—1051: Lach. goes sadly astray, μέγας μεγαλωστί. **529** *Versibus* is thus nakedly put I 416 *Quam tibi de quavis una re versibus* cet.; and *dictis* with the same sense more than once. **530** *Ex infinito*, i. e.

tempore, not *spatio*, apparently: see n. to I 1001: but here it is not quite certain. **531** *protelo*: IV 190 *Et quasi protelo stimulatur fulgere fulgur*: from the passages of Lucilius and others quoted by Forc. the word appears to denote a number of draught-oxen yoked one in front of the other and advancing by even successive pulls: hence it well expresses the effect produced by the continuous succession of blows of atoms. **532** *Nam quod* cet.: an apparent objection to some shapes having an infinite number of atoms, but only apparent: the *quod vides* is like the familiar *quod scribis* in Cicero, to introduce his own answer or opinion: see n. to IV 885. **535** *numerum*: so as to bring it up to an average: comp. *quingentorum numerum explebant* and similar expressions so common in Livy. **537** *anguimanus* recurs V 1303 as the acc. plur. fem.: Lach. quotes Priscian to shew that *centimanus unimanus* and the like are declined like *manus* and observes that Lucr. is the only writer of authority who uses any of these words except in the nom. and acc. sing.: Cic. de nat. deor. II 122 *manus etiam data elephanto est.* **538** I know no other mention of this fable. **543** *orbi*: see n. to I 978. **546** *quod superest*: see 491 and n. to I 50. **547** *sumam hoc quoque uti* seems to me not only near the ms. reading, but to give the sense needed: were I to *assume* this further, that the elements were finite, my argument would be proved by the absurdity of the conclusion: euphony has determined the position of the words, as *Quippe etenim hoc quoque uti* would have had a very harsh sound: comp. III 293 *fit qui* and n. there, and IV 752 *Nunc igitur docui quoniam*: for *ut* thus placed comp. IV 638 *Extetque ut serpens*; V 871 *nec ipsa Sponte sua possent ut vivere*; VI 784 *capitis faciant ut saepe dolores*; 887 *calidus queat ut fieri fons*; 1064 *Inpellant ut eam*; 1214 *neque se possent cognoscere ut ipsi*; Hor. sat. I 4 105; Ov. ex Ponto II 9 80; III 3 95 *faveas quin his* (mss.: *quin his faveas* vulgo). **550** *turba aliena*, of atoms different in kind. **553** [*disiect.*: used by Amm. Marc.: see Herz in Hermes VIII p. 269.] *guberna* occurs in Lucilius too ap. Nonium p. 490. **555** *fl. apl.*: Cic. Arat. frag. XXII *Navibus absumptis fluitantia quaerere aplustra. aplustre*, in plur. *aplustra* or *aplustria*, was a fan-like erection of planks rising above the poop: Lucan III 585 *dum pugnat ab alta Puppe Tagus Graiumque audax aplustre retentat.* [On *aplustra* see Mayor to Juv. X 135.] **559** comp. V 1004 *Nec poterat quemquam placidi pellacia ponti Subdola pellicere in fraudem ridentibus undis*; Virgil has the adj. *pellax*: these two appear to be the only good writers who use the words. **561** *aerom*: so III 589 *omnem...per aerom*; Plautus has *vitalem aevum.* **567** *Esse igitur* cet.: he assumes now that he has proved the question stated 522 foll.; the whole paragraph therefore stands in closest connexion one part with the other. **568** *palam est* = apertum est, is found also in Cicero, and Livy XXXI 14 8 and Pliny XXIX 11: Plautus has *res palam est*; *rem palam esse*; Terence *palam*

est; [and Bruttedius Niger ap. Sen. rhet. suas. VI 21 *hoc certe publicum beneficium palam erat*:] comp. *palamfacere*, and III 355 *ipsa palam quod res dedit ac docuit nos*: so V 1157 *id fore clam.* *un. om. sup.* i. e. unde omnia primordia, quae suppeditantur, suppeditantur: but perhaps it is simplest to take it for *omnes res suppeditantur*: see n. to I 230; and for the sense comp. II 589—597.

569—580: thus production and destruction alternately prevail, their elements ever waging equal war: no day passes without some dying, some being born. **569** *itaque*: for its place in the sentence see n. to I 419 on *igitur*. *itaque*: because the atoms of each shape being infinite, those which tend to preserve or destroy anything are alike infinite. **571** *rer. gen. auct. mot.* i. e. motus principiorum quae generant et augent res. *auctifici* is a ἅπαξ λεγόμ. **574** *contractum...bellum*: IV 968 *contractum cum ventis degere bellum.* **575** *vitalia* (primordia) *rerum*: comp. VI 771 *Multa, cibo quae sunt, vitalia.* **576** *vagor*: Festus p. 375 quotes this passage and one of Ennius as authority for this form. **577** *visentis* is nom. plur.: see n. to I 808 *animantis.* **578** *Every minute dies a man, Every minute one is born.* Here he has been content perhaps to sacrifice philosophical to poetical distinctness: what as an epicurean he means to say is that in the universe of things death and destruction are evenly balanced by life and production. Wishing to illustrate this doctrine, he has drawn his images from the apparent equality that there is in our world, so long as things continue as they are. But he elsewhere teaches, as his system required him to do, that our world came into being only yesterday, and sooner or later must be destroyed in an instant with all that is in it. What becomes then of this balance so far as we are concerned? he no doubt felt that its ruins would go to construct something else; but that he has not said. This balance of the whole universe, says the epicurean in Cic. de nat. deor. I 50 *ἰσονομίαν appellat Epicurus, id est aequabilem tributionem...et, si quae interemant innumerabilia sint, etiam ea quae conservent infinita esse debere.*

581—599: this you must carefully bear in mind: the more powers and properties anything possesses, the greater variety of elements it contains: thus the earth has elements out of which seas and fountains and fires, out of which crops and trees, rivers and pastures are supplied; it is therefore called mother of gods, men and beasts alike. **581** *obsignatum*: the force of the metaphor is obvious: the signing and sealing a document is a proof of its importance. *quoque* would certainly seem to belong rather to *Illud* than to *obsignatum*; as 216 *Illud in his quoque te* cet. where there is no doubt: see n. to V 192: it might here be explained *sealed*, as well as written and deposited: Ov. her. XIII 66 *Signatum memori pectore nomen habe.* **582** *mandatum* i.e. menti, follows on the *obsig.* **586** *vis multas*: III 265 *multae vis*: Probus cathol. p. 19 22

Keil 'Lucretius tamen numero plurali hae *vis* et has *vis*'; p. 31 1 'hae *vis*, sicut Lucretius et Varro'; Sallust and Messalla also use this form. **590** *volventes frigora*: a bold and beautiful image. **593** *imp. Aet.*: VI 281 *gravis ignis Impetus.* **595** *habet* (corpora prima) *unde.* **596** comp. 875. **598** *Quare* cet.: having more variety of first bodies in her, she has greater powers of production; and therefore is preeminently styled the mother of all living things, as from her alone comes the food which sustains all. *mag. deum mat.*: 655 *terrarum dictitet orbem Esse deum matrem*: this and the *mater Idaea* were her legal and official names: see n. to 611. Dio speaking of Cybele's temple at Rome calls her ἡ μητὴρ τῶν θεῶν.

600—660: her the old Greeks have personified as the great mother: she rides in a chariot drawn by lions; wears a mural crown, has Phrygian attendants, is accompanied with noisy music, receives on all hands alms; her followers represent the Curetes who saved the young Jupiter from his father: all which things are an allegory with some moral significance; but beautiful as they are, they are mere fancies; the blessed and immortal gods trouble themselves not about men: as you call the sea Neptune and the like, call the earth mother of the gods, if you please; but remember at the same time that it is senseless matter, only containing the elements of many things. **601** Aen. III 113 *Et iuncti currum dominae subiere leones*; X 252 *Alma parens Idaea deum cui Dindyma cordi Turrigeraeque urbes biiugique ad frena leones*; and Soph. Phil. 399 Ἰὼ μάκαιρα ταυροκτόνων Λεόντων ἔφεδρε. **602** foll. Varro quoted by St Austin de civit. dei VII 24 *quod turres in capite* (habeat significari esse) *oppida; quod sedens fingatur, circa eam cum omnia moveantur, ipsam non moveri...leonem adiungunt solutum ac mansuetum, ut ostendant nullum genus esse terrae tam remotum ac vehementer ferum quod non subigi colique conveniat*: see Haupt in Hermes IV p. 333; he quotes Servius on Aen. III 113, who paraphrases this passage of Lucr. **603** comp. I 1057. **604 605** comp. Ovid fasti IV 215 *coepi 'cur huic genus acre leonum Praebeat insolitas ad iuga curva iubas'. Desieram. coepit 'feritas mollita per illam Creditur: id curru testificata suost'*: all this part of Ovid much resembles Lucr. **606** *Murali corona*: Aen. VI 784 *Berecyntia mater Invehitur curru Phrygias turrita per urbes*; Ov. l. l. 219 *At cur turrifera caput est onerata corona? An primis turres urbibus illa dedit?* and Spenser f. qu. IV 11 28 *Old Cybele arayd with pompous pride, Wearing a diadem embattild wide With hundred turrets like a turribant*: the mural crown given to the soldier who first mounted the walls was imitated from the walled crown of Cybele. **611** *Idaeam voc. mat.*: her legal name: Cic. de leg. II 22 *Praeter Idaeae matris famulos...ne quis stipem cogito*; and Livy XXIX 10 5 the Sibylline books say *si mater Idaea a Pessinunte Romam advecta foret*: the expression continually recurs in Livy; XXXVI 36 3 he joins *matris magnae Idaeae*;

Sueton. III 2 *matris deum Idaeae*: see n. to 598, and Wilmann's ex. inscr. Lat. indices p. 478: Augustus says in his res gestae IV 8 *aedem matris magnae in Palatio feci*; as she is termed by Livy too. *Phrygias*: Lucr., as Virg. Aen. IX 80 *Phrygia...in Ida*, points to the Trojan or Phrygian Ida: the whole worship was purely Phrygian: Eurip. Bacch. 58 τἀπιχώρι' ἐν πόλει Φρυγῶν Τύμπανα, Ῥέας τε μητρὸς ἐμά θ' εὑρήματα: though, as we can see in this very passage, the Phrygian and Cretan legends got mixed together. **613** *creari* = nasci: therefore *coepisse* may be used instead of *coeptas esse*. **614** *numen...Matris* i.e. Cybeles, though Creech sneers at poor Fayus of the Delphin for so taking it. **615** *et* cet. explains *numen qui vi. ma.*: they outrage her divinity by ingratitude to parents; as she is great mother of men as well as gods: see 599. For this explanatory use of *et* comp. n. to III 993 *atque exest. et* here = 'that is to say'. **617** *quĭ in*: see n. to 404. **618** *palmis*: it appears from old paintings that the *tympanum* was struck with the open hand: Catul. 64 261 *Plangebant alii proceris tympana palmis*; 63 21 *Ubi cymbalum sonat vox, ubi tympana reboant*; [Anthology (Riese) 726 18 *resonant cava tympana palmis*. See too Mayor Juv. VIII 176 and index s.v.] *tenta*, explained by Auson. in his imitation, epist. 25 21 *tentis reboant cava tympana tergis*. *cym. cir.*: Virg. geor. IV 64 *matris quate cymbala circum*; Ovid fasti IV 213 *Cymbala pro galeis, pro scutis tympana pulsant, Tibia dat Phrygios, ut dedit ante, modos*; met. IV 29 *inpulsaque tympana palmis Concavaque aera sonant.* **619** *raucisono* cet.: V 1084 *Raucisonos cantus*; Catul. 64 263 *raucisonos efflabant cornua bombos*: an imitation of Lucr.; see context. **620** *mentis*: see introd. vol. I p. 35. **624** imitated by Virgil l. l. to 606. **625** *Munificat* and **627** *largifica* appear to be ἅπαξ λεγόμενα. **626** *iter viarum*: V 1124 *iter infestum fecere viai*; 714 *cursusque viam sub sole tenere.* **627** *ningunt*, a fine image to express the thick falling of the flowers: Ovid ex Ponto II 1 36 *Saxaque roratis erubuisse rosis*: Lucr. seems alone to use the word in this way and with this sense; but *pluo, fulmino*, etc. are often used personally as well; 618 we had *tonant*. **629** *Curetas...Phrygios*, called after 633 the *Dictaeos Curetas*: most Greek authorities confine the *Curetes* to Crete, and call the Phrygian attendants *Corybantes*; but Eurip. Bacchae 120—125 places the Κουρῆται and Κορύβαντες both in Crete, and so Ovid l. l. 210 unites the two, *Hoc Curetes habent, hoc Corybantes opus*: comp. too German. 35 *attonitae cum furta parentis Aerea pulsantes mendaci cymbala dextra, Vagitus pueri patrias ne tangeret auris, Dictaei texere adytis famuli Corybantes*, his original having Δικταῖοι Κούρητες: German. appears to leave his original in what precedes too for Lucr. Later Latin poets confound the *Curetes* and *galli*. **630** *forte*: 'quo poeta' says Lach. 'significat eos non semper armis ludere, sed interdum, si quando libuerit'. *quod* refers of course to 633 *referunt.* **631** *Ludunt in*

num. ex. and **636** *in numerum pulsarent* cet.: Virg. ecl. VI 27 *in numerum faunosque ferasque videres Ludere*: IV 769 *Bracchiaque in numerum iactare et cetera membra*; 788 *in numerum procedere*; Ov. trist. IV 1 10 *In numerum pulsa...aqua.* V 1401 *extra numerum procedere* is the opposite: so Cic. parad. III 26. **632** almost repeated V 1315: Ov. met. I 179 *Terrificam capitis concussit terque quaterque Caesariem.* *numine* implies the swaying of the head to this side or that: comp. IV 179 *In quem quaeque locum diverso numine tendunt.* Wagner philologus suppl. I p. 400 well defends *numine*, and asks why the mss. which in 4 or 5 places rightly keep *nomen*, should just err in these two places, where *numine*, supposing it can have the sense of *nutus*, seems more appropriate: Conington to Aen. II 123 compares Catul. 64 204 *Adnuit invicto caelestum numine rector, Quo* cet. where both meanings seem to unite: Livy VII 30 20 *annuite, patres conscripti, nutum numenque vestrum invictum Campanis.* **633** foll. Ov. l. l. 207 *Ardua iamdudum resonat tinnitibus Ide, Tutus ut infanti vagiat ore puer. Pars clipeos sudibus, galeas pars tundit inanes.* **635** *pueri* with reference to the name Κουρῆτες: *pueri, puerum* followed by *aeribus aera* is another of his many assonances. Lucr. may have been thinking here of Callimachus hymn. in Iov. 52 Οὖλα δὲ Κουρῆτές σε πέρι πρύλιν ὠρχήσαντο Τεύχεα πεπλήγοντες ἵνα Κρόνος οὔασιν ἠχήν Ἀσπίδος εἰσαΐοι καὶ μή σεο κουρίζοντος. Comp. Aen. I 684 *pueri puer indue vultus*; V 569 *pueroque puer dilectus Iulo*; Plaut. capt. 626 *puerum te vidi puer*; 639 *iam inde usque amicus fuit mihi a puero puer*; Ov. ex Ponto IV 3 12 *Paene puer puero iunctus*; 12 20 *Paene mihi puero cognite paene puer.* *pernice*: V 559 he has the more usual *pernici*: comp. *simplice* in I 1013: Catullus has *infelice*; and even in Cicero are found *felice furace truce*: see also Mommsen, Hermes I p. 466, and Neue II p. 47—49. Propert. I 8 19 I would read *Ut te praevectam felice* (*felici praevecta* mss.) *Ceraunia remo*: *ce* of *felice* was prob. absorbed in *Ce* of *Ceraunia*, and then *felici praevecta* read to give a verse. **636** comp. Ovid cited just above and to 618; and met. III 532 *aerane tantum Aere repulsa valent?*; fasti IV 183 184: the Cretan Curetes clashed with real arms; the cymbals and tambourines of the Phrygian Curetes recall the memory of that old story. **638** *malis mandaret*: Cic. de orat. III 217 and again Tusc. IV 77 quotes from Accius *hortatur me frater ut meos malis miser Mandarem natos*, as the latest editors of Cicero read after all the best mss. of the Tusc.; but the best mss. of the de orat. and Ribbeck trag. rel. have *manderem*; which certainly is the more natural expression: so Virg. geor. III 268 *malis membra absumpsere*; Aen. III 257 *malis absumere mensas*: yet Lucr. seems to have read or thought he had read in Accius *mandarem.* **639** Aen. I 36 *aeternum servans sub pectore vulnus*: Lucr. himself I 34 *aeterno devictus vulnere amoris.*

646—651: of many passages which might be quoted the most in point is the first κυρία δόξα of Epic. himself in Diog. Laer. X 139 τὸ μακάριον καὶ ἄφθαρτον οὔτ' αὐτὸ πράγματ' ἔχει οὔτ' ἄλλῳ παρέχει, ὥστ' οὔτ' ὀργαῖς οὔτε χάρισι συνέχεται· ἐν ἀσθενεῖ γὰρ πᾶν τὸ τοιοῦτον, translated by Cic. de nat. deor. I 45 *quod beatum aeternumque sit, id nec habere ipsum negotii quicquam nec exhibere alteri, itaque neque ira neque gratia teneri, quod quae talia essent inbecilla essent omnia*: at V 146 foll. and 1161 foll. more will be said on this question: that Epicurus and Lucr. firmly believed in the existence of these gods is certain; how this immortality and supreme felicity can be reconciled with the rest of their philosophy, it were vain to ask; for no answer could be given. Did the gods exist from all eternity? or had they a beginning? The words of Ennius trag. 353 are well known, *Ego deum genus esse semper dixi et dicam caelitum, Sed eos non curare opinor quid agat humanum genus.* **646** with *Omnis divom natura* comp. 757 *si nulla coloris principiis est Reddita natura*; I 710 *in rerum naturas vertier omnis*: he usually gives the epithet to *natura*, not to the substantive depending on it: see n. to I 281 *mollis aquae natura*; and comp. also I 962 *haec sensus natura.* *divom natura* seems to be a mere periphrasis for *divi*; as I 194 *natura animantum* for *animantes*: comp. too *natura aquae, mundi, animi, animae, sensus*, etc. **649** *privata* = expers, is very common in Lucr. as III 905 *cunctis privatu' doloribus aegris.* **650** paraphrased by Claudian de cons. Mall. Theod. 4, who says of virtue *Nil opus externae cupiens, nil indiga laudis, Divitiis animosa suis.* **652** *Neptunum*, as he himself does 472 *Neptuni corpus*: 653 *Bacchi nom.* as he does himself III 221 *Bacchi cum flos evanuit*: but in these verses he doubtless points at the stoics who carried allegory of this kind to an absurd length: see what the stoic Balbus says in Cic. de nat. deor. II 50 foll. Every part of heaven and earth was thus parcelled out among the gods and demigods, and fatuous derivations assigned to their names by Zeno Cleanthes Chrysippus and other leaders. **653** *Bacchi*, **654** *laticis*: *Bacchi latex vinum* glossary in Hermes VI p. 176: see too Mayor on Juv. VII 25, 2nd ed.; and comp. Cic. de nat. III 41. **656** *ipse* seems most simply taken with *animum*, so that it = ipse suum animum: so Aen. XI 544 *Ipse sinu prae se portans*; and so *ipse manu* often in Virgil = sua manu. It may denote the real man in contrast with his empty words: the exact force of *ipse* is often easier felt than expressed. **658—660 (652—654)** see notes 1; and for an explanation of this transposition see vol. I p. 29. **659** *potitur primordia*: the same constr. is found III 1038 *Sceptra potitus*, and IV 760 *quem...potitast*: the latest editors appear to banish it wholly from Cicero; but the best mss. of the auctor ad Heren. IV 57 have *potitus est gloriam*: this constr. is very common in the fragments of the old tragic writers; and the auctor belli Africae has it 4 or 5 times, auctor belli Hisp. once; both homely writers and contemporaries of Lucretius.

661—699: in this way sheep horses and cattle, eating the same grass and drinking from the same river, all keep their distinctive differences; thus grass and each river must contain most different elements: nay the parts of the same animal are quite different; and are formed therefore of different elements: then too fuel must contain elements of fire and flame and ash; then many things have divers properties, colour flavour and smell; and these have all different elements as they enter things in different ways; things therefore must be of mixed seed: again as the same letters are common to different words, so the same elements may be common to most different things, to men and corn and trees. **661** *itaque* manifestly refers to *Multa modis multis effert*: with these words in their old place it has no meaning: the thread of the argument dropped at 599 is again resumed, i.e. the great variety of elements the earth contains. **662** *duellica*: so *duellum duellatores, perduellis* which always remained in use, *Duelonai* is an old inscription, *duonoro* (bonorum) on the tomb of the Scipios: Lach. quotes from Plautus capt. prol. *bellique dvellatores optumi*, the *u* of such words in Plautus being generally, as here in Lucr., a consonant; so Ennius *perdvellibus*. **663** *Buceriae*: Nonius Charisius Servius all attest the feminine: Lucr. uses the neut. *bucera* more than once. *sub. teg. caeli*: see I 992. [**664** *flum. aquai*: Aen. XI 495 *aquae perfundi flumine noto*.] **669** *Hinc porro*, **671** *porro*, **673** *Tum porro*, as if the use of the word suggested unconsciously its repetition. **678** *igitur*: see n. to I 419: it has the force which it not unfrequently has in the old writers, as Plaut. miles 772 *Quando habebo, igitur rationem mearum fabricarum dabo*, the participial clause being equivalent to a protasis: see Hand Turs. III p. 185. **679** *figuras*, **682** *figuris* and **685** *primis figuris*: see n. to 385: in these three places the word clearly refers to atoms, but may include also shapes of atoms; as it must so far have been ambiguous to Lucr. **680** foll. see Journal of philol. IV p. 243 244: III 266 *Quod genus in quovis animantum viscere volgo Est odor et quidam color et sapor*, seems like a reference to our passage, confirming my conception of it. **681** *Reddita*: for the neut. referring to 2 masculines Lach. compares III 282 *ventus et aer Et calor inter se vigeant commixta*: III 559 the neut. is even harsher; see n. there: the neut. is the rule when the prec. substantives are masc. and fem. *cŭm od.*: see n. to 404. *dona*: IV 1237 *adolentque altaria donis*; VI 752 *non cum fumant altaria donis*. **683** *Nidor*, which specially designates the smell of burnt animal matter and other greasy substances, is substituted for *odor* of 681. **683** and **684** *fucus* = color: so 744 *nullo circumlita fuco*, and IV 84 *fucum Mittunt*. **685** *pr. fig.*: VI 776 *primasque figuras*. **688—690** = I 823—825. **691** *multa parum*: see n. to 336. **694** = 337 = 724. **698** *merito ex aliis* cet. though they have very many elements in common.

700—729: but all elements cannot unite in all ways: else monsters of all kinds would arise: every creature has its fixed seeds, its fixed mother; and thus is kept within its limits; and of the elements it takes as food some only remain, others are rejected as unsuitable: and so it is with inanimate as well as animate things; they have each elements different or differently combined; and the modes of action of these elements differ, so that not only living bodies, but all nature, earth sea and heaven, are kept distinct. **700** foll. this question is more fully discussed V 837—924. **702** *Semiferas* the centaurs: comp. V 878 foll. **703** *egigni* seems a ἅπαξ λεγόμ.: with *eg. corp.* comp. VI 761 *Et quibus effiant causis*, and n. to V 703: Hor. sat. II 2 105 *tanto emetiris acervo*. **704** he speaks of Scylla: comp. V 893. **705** comp. V 900—906. **706** *omniparens terra* is found also V 259 and in Virgil. **710** and **725** *necessust* recurs IV 1006: see n. to 289, and Lach. VI 815; who shews that Terence has *necessus fuit, sit necessus*: Plautus *necessumst, necessust, necesse est*, all three forms found in Lucr. But *necessust* in Plautus must surely be *necessus est*, and this contraction Lucr. would not use: are we to read *necessumst* here, or is there a nom. *necessu*? **711** *intus* i.e. when they are inside the body. **714** *reicere* i.e. the different excrements. *multa caec. cor...e cor.*: see n. to I 875, and II 843 846 *Corpora prima.. Nec iaciunt.. de corpore*: here in fact *multa* would naturally agree with *corpora*; so that we should then have *multa corpora Corp. caec. fug. e corpore*. **717** *consentire* = una sentire. **719** *disterminat* is used by Cicero Arat. 94: 'keeps the *termini* of things apart.' **725—729** as the atoms differ in shape, then the void spaces between them, when they are in union, must differ; and therefore the passages, the manner in which they are linked together, the weights collisions and the like must all differ: thus not only does each living thing preserve its individuality, but inanimate things as well; and indeed the great divisions of the whole world, earth sea and heaven, are kept from intermingling: heaven earth sea have all many common elements, but as a rule the heavier and those which unite more closely will seek the heavier earth, the lighter the lighter ether or air and the like. **726** *Intervalla—motus*: recurs V 438 439, and partly, I 633 634. **729** *retentant* seems synon. with *retinent*.

730—756: atoms have no colour whatever: the mind has to conceive them as without colour; for any colour may change into any other; but the first bodies are unchangeable, or things would pass into nothing.—He proceeds to shew that atoms have none of what are called secondary qualities, colour and the like: the import of this section is briefly given by Epicurus in Diog. X 54 τὰς ἀτόμους νομιστέον μηδεμίαν ποιότητα τῶν φαινομένων προσφέρεσθαι πλὴν σχήματος καὶ βάρους καὶ μεγέθους καὶ ὅσα ἐξ ἀνάγκης σχήματι συμφυῆ ἐστί. ποιότης γὰρ πᾶσα μεταβάλλει, αἱ δ' ἄτομοι οὐδὲν μεταβάλλουσιν, ἐπειδήπερ δεῖ τι ὑπομένειν ἐν ταῖς δια-

λύσεσι τῶν συγκρίσεων στερεὸν καὶ ἀδιάλυτον, ὃ τὰς μεταβολὰς οὐκ εἰς τὸ μὴ ὂν ποιήσεται οὐδ' ἐκ τοῦ μὴ ὄντος: and Diog. 44 referring forwards to this passage adds *τὸ δὲ χρῶμα παρὰ τὴν θέσιν τῶν ἀτόμων ἀλάττεσθαι ἐν ταῖς δώδεκα στοιχειώσεσί φησι* ('Επίκ.). Democritus, as appears from Diogenes Sextus Stobaeus and others, held quite the same views. **730** *Nunc age* calls for attention as he is passing to a new and important argument. **731** *albis ex*: see n. to I 841. **733** *nigrant*, a very rare word except in the pres. partic. **734** *Nive*: III 286 *Ni*; [Lucil. XXIX 73 *ni rediret*,] Catul. 61 153, and? Aen. III 686: Orell. inscr. Lat. 4783 *rogo per deos superos inferosque ni velitis ossa mea violare*: the new corp. inscr. Lat. has many instances of *ni* and *nive* and more than 100 of *nei* and *neive* which connect the *ni* with the common form *ne*: see also Donatus quoted to I 277 *nimirum*. *inb. colorem*: Virg. geor. III 307 *Vellera . . Tyrios incocta rubores*; Tac. hist. V 5 *nec quicquam prius inbuuntur quam contemnere deos*; III 74 *aramque posuit casus suos in marmore expressam*, imitated from Val. Flacc. I 398 *casusque tuos expressa, Phalere, Arma geris*; id. II 655 *Pocula bellorum casus expressa*; I 402 *caelata metus alios gerit arma*: [comp. also Draeger hist. synt. I p. 335 (inscriptus, suspensus, cet.), and Stat. Theb. IV 267 *pictus praelia*.] **740** *animi iniectus*: 1047 *animi iactus liber quo pervolet ipse*: comp. Cic. de nat. deor. I 54 there quoted, who uses *in quam se iniciens animus* in the same way: Gronovius obs. I 4 p. 65 shews that both Cicero and Lucr. are translating Epicurus' technical word *ἐπιβολή* or *ἡ φανταστικὴ ἐπιβολή*: comp. Epicurus in Diog. Laert. X 62, where *τὸ κατ' ἐπιβολὴν λαμβανόμενον τῇ διανοίᾳ* is opposed to what is perceived by sense; they are the two great ways by which truth can be arrived at. **741** *caecigeni* seems peculiar to Lucr. **743** *Ex ineunte aevo* recurs in Lucr. five times and always denotes, as here, the beginning of the life or existence of some living or inanimate things. **748** a verse must be lost here, such as *Corpora quae constant nullo coniuncta colore*. **749** *Omnis, omnino, in omnis*. The argument is curtly, but clearly expressed: any colour may change into any other; if then white colour comes from white atoms, black from black, the atoms must change; but this we have proved to be impossible. **751—754** = I 790—793. **755** *contingas*: see n. to I 934.

757—787: again if atoms have no colour, but beget any colour by their different shapes positions motions and the like, you can explain change of colour: thus the green sea becomes white: why? by its elements changing their order, and by some going, others coming: but green elements could not become white. But if you say they have different colours, then you should see in the one colour of the sea others quite different mixed up, as in a square composed of various shapes you see these shapes: again these shapes do not prevent the whole exterior being square; but different colours would prevent a thing being of one colour.

757 foll. with this and with what precedes and follows comp. what Plut. adv. Colot. 7 cites from the 2nd book of Epicurus against Theophrastus: colours are not *συμφυῆ τοῖς σώμασιν, ἀλλὰ γεννᾶσθαι κατὰ ποιάς τινας τάξεις καὶ θέσεις πρὸς τὴν ὄψιν κ.τ.λ.* **760—762** nearly = I 817—819, 908—910, II 1007—1009. **767** *candenti marmore* is abl. of quality: with *canos candenti* comp. 771 *candens et album*, both mere pleonasms: ciris 320 *candentes canos*; Catul. 64 14 *candenti e gurgite*, 18 *e gurgite cano*. **777** *nitorem* = colorem, as 782 787 and 819. **780** *Conveniebat*, after 776 *Sin sunt*: the tense always used by Lucr. in this sense: another proof, if that were needed, that III 685 *Convenit* cet. is spurious, the right form *Conveniebat* having preceded in 682. **785** *extra*, on the outside, opposed to what is *intus*, seems quite to suit the meaning: comp. Varro de re rust. III 16 16 *vitiles fimo bubulo oblinunt intus et extra*; [Quintil. inst. orat. I 10 43 *deni in quadram pedes, quadraginta per oram, intra centum erunt*:] comp. too Lucr. IV 646 *Ut sunt dissimiles extrinsecus*.

788—794: we are tempted to give to atoms colour, not knowing how colour otherwise can come: but we have seen that white can come from what is not white; and surely white can arise more easily from no colour, than for instance from black: this reason then falls to the ground. **789** *causa*, i.e. the vulgar notion that things with colour cannot come from things without colour; which is easily understood from 730 foll. **790** *quoniam*, as seen in the last paragraph. **791** *cluent* = sunt. *variis ex*: see n. to I 841.

795—816: again colours cannot exist without light, atoms never come into the light, therefore atoms have no colour: what colour can there be in darkness, when we see that the same thing continually changes its colour in different lights? as therefore it is such and such stroke of light which produces such and such colour, without that stroke they cannot exist: as too one stroke produces white, another black, and as a stroke is a touch, and as it is shape, not colour, which affects touch, atoms need, not colour, but different shapes to give different touches. **795** foll. Lucretius' syllogism is quite correct; it is Lambinus' which is in fault, who quite misstates the poet's minor premiss. **797** *velata*: a picturesque metaphor. **799** *quin ipso* = quinetiam: see n. to I 588. **802** *cervices collumque*, one of his many pleonasms; as *cervices* means the back, *collum* the whole circle of the neck: Cic. in Vatin. 4 *inflato collo, tumidis cervicibus*; pro Sestio 90 *et cervices et iugulum*. **803** 'the *pyropus* was made by adding 6 scruples of gold, or one quarter, to the ounce of copper' King on gems p. 116. But the pyrope was also a precious stone, a kind of garnet: ib. p. 53; and this meaning agrees perhaps better with the *curalium* and *zmaragdos* of 805. Ovid. met. II 2 *flammasque imitante pyropo*. **804** *sensu* refers to the beholder's perception or mode of viewing it: IV 448 *quodam sensu fit uti videantur Omnia*.

805 Wak. well compares Samon. 952 *Curalium vero si collo nectere males, Ne dubites illo virides miscere smaragdos*: he plainly imitates Lucr. **807** *obversa*, as it turns about: Aen. III 549 *Cornua velatarum obvertimus antemnarum*; Ov. met. III 676 *obstantes dum vult obvertere remos.* **809** *Scire licet*: see n. to I 210.

817—825: again if atoms have colour, it will not be said that this or that colour belongs only to this or that shape of atom: why then should not things formed out of coloured atoms vary their colours also? why should not crows be sometimes white, swans black or green? **819** *Formamenta*, another of the many words which seem peculiar to Lucr. and his imitator Arnobius. **821** *perf. col.*: Aen. V 111 *ostro Perfusae vestes.* **825** may be briefly put for *Aut cycnos fieri alio quovis colore, vel uno vel vario, de semine eius coloris*; and then with *uno varioque* comp. 830 *Purpura poeniceusque color* i. e. color sive purpureus sive poeniceus; V 985 *Spumigeri suis adventu validique*, where Lach., as I now see, wrongly reads *ve* for *que*; 1237 *dubiaeque minantur*, where Bentl. reads *dubiaeve*; VI 114 *chartasque volantis*: Wagner quaest. Virg. XXXIV 1 gives many similar instances from Virgil of *que* with the force of *vel, vel* or *sive, sive*: comp. too n. to III 551 *manus atque oculus naresve.* But as Lucr. is so fond of *quivis unus* for *quivis* simply, I now take *alio varioque colore* to be one of his many pleonasms for *alio colore* or *vario colore*: comp. 778 *ex aliis formis variisque figuris*; 783 *Dissimiles longe inter se variosque colores*; V 1060 *Dissimilis soleant voces variasque ciere.*

826—833: again the smaller the shreds into which a thing is divided, the more its colour vanishes: be sure that all colour is gone before a thing comes to its first elements. **829** with *austrum* and *ostrum* comp. *Claudius* and *Clodius*, *Paulus* and *Pola*, *ausculum ausculari* and *osc.*, *aula*, *aulularia* a play of Plautus, and *olla*, *plaustrum* and *plostrum*, and the like; *laurea*, and the plebeian *lorea* in a proverb quoted by Cic. ad Att. V 20 4. *austrum* is the general term for the purple cloth of whatever hue: [so in Catull. 64 48 *quod...Tincta tegit roseo conchyli purpura fuco*, *purpura* is the purple cloth:] comp. Aen. I 700 *stratoque super discumbitur ostro*; Hor. epist. I 10 26 *Sidonio ostro*; Stat. Achill. II 82 *picto discumbitur ostro*: whether this cloth be the *purpura* or darker hue, or the *poeniceus* or bright scarlet. Prop. V (IV) 3 51 *Poenis tibi purpura fulgeat ostris*; Aetna 333 *purpureo ostro*; Sen. Med. 99 *ostro puniceo*; Claudian Prob. et Olyb. consul. 90 *Album puniceo pectus discriminat ostro.* Lach. shews that *poeniceus puniceus poinicius punicus* have all the same meaning, belonging to the *Poeni*: thus the lex Thoria has *bello Poenicio*, Ovid *A duce Puniceo*, while Horace applies *Punico* to the colour; as does Ovid too, am. II 6 22. **832** *effl. col.*: V 652 *suos efflavit languidus ignis.*

834—841: you do not assign sound or smell to things which give forth no sound nor smell: why then attribute colour to all things? the mind can perceive things without colour as well as things without smell.

842—864: but atoms are likewise without heat or cold, without sound flavour or smell. As in preparing a perfume you seek out a quite scentless oil, that it may not infect the perfume with its own scent; thus first-beginnings must possess neither heat nor cold, smell sound nor flavour; these qualities are all frail and mortal, and must therefore be wanting to immortal elements unless things are to pass away to nothing. **842** *colore*: the frequency with which this word has been repeated in the last 100 lines is very striking. **842** foll. notice the variety of expression to denote privation: *spoliata secreta sterila ieiuna seiuncta*, and above *privata, sine odore, sonitu remota, orba colore, efflare stingui evanescere colorem*; all in the compass of a few lines. Democritus before him in Sextus adv. math. VII 135 said νόμῳ γλυκὺ καὶ νόμῳ πικρόν, νόμῳ θερμόν, νόμῳ ψυχρόν, νόμῳ χροιή· ἐτεῇ δὲ ἄτομα καὶ κενόν. **843** *manere* = esse, 845 *feruntur* = sunt, as *cluent* so often is in Lucr.: it is curious that two such opposite words should come to have the same force: *feruntur* is elsewhere applied by him to his atoms in onward motion; but that can hardly be its sense here: with *manere* comp. VI 1274 and the use of *stare* in n. to II 181. [*manere* is thus used by Sall. hist. orat. Lepidi 24 *nisi maneat expulsa agris plebes.*] *secreta teporis*: I 194 *secreta cibo*, with abl. **844** *calidi vaporis*: *calidus* in Lucr. is a perpetual epith. ornans of *vapor ignis fervor* etc.: comp. *gelidae pruinae, gelidus rigor, candens lacteus umor, aeriae aurae, sonitu sonanti* and the like: 858 *calidum tepidumque vaporem*, the epithets are distinctive. **845** *sonitu sterila*: the gen. is more common: the form *sterilus* is mentioned by Festus: see n. to I 340. *suco ieiuna*: Cic. orator 106 has the gen., *ieiunas igitur huius...orationis aures civitatis accepimus.* **846** *ullum proprium odorem*: 855 *adhibere suum gignundis rebus odorem.* **847** *amaracini*: this perfume is mentioned IV 1179 and VI 973. Daubeny Rom. husbandry p. 272 'Dioscorides and Pliny both tell us that *amaracus* was the same plant as *lampsana*, and the latter is considered by Sibthorp to be our marjoram, *origanum maiorana*, a native of Egypt and Crete'. *stactae*, named from the dropping of the myrrh juice: Pliny XIII 17 says *murra et per se unguentum facit sine oleo, stacte dumtaxat*; and Dioscor. I 73 says the same, στακτὴ...καθ' ἑαυτὴν μύρον καλούμενον, δόκιμος δέ ἐστιν ἡ ἀμιγὴς ἐλαίῳ: but the point of Lucretius' argument is the mixture with oil. **848** *nardi florem*, unless Lucr. is speaking vaguely, must be used, as *Bacchi flos* and the like, for the aroma or bouquet; as it appears from Pliny and Dioscorides that it was the ear and leaf of the eastern *nardus* that was used in perfumes; the stalk and root of the northern. **849** *Cum...instituas*: see n. to 41. **850** *possis* is potential, because the 2nd pers. sing.: see n. to I 327: if he can there use *potest* and *possis* in the same passage, he may surely

here join *licet* and *possis*: comp. too Ovid rem. 415 *Dum piget et malis nullam tetigisse puellam Tacturusque tibi non videare diu*: but comp. too ars III 761 *Aptius est deceatque magis.* *inolentis* another ἅπαξ λεγόμ. 851 *auram*: Martial III 65 2 *de Corycio quae venit aura croco*; and Virg. geor. IV 417 *spiravit crinibus aura.* 853 *viro* in this sense is almost unexampled: VI 805 *odor viri* is used for the pungent fumes of charcoal. [Mart. VI 93 7 *Virus ut hoc alio fallax permutet odore*; I 87 5 *Quid quod olet gravius mixtum diapasmate virus?*] 859 *Cetera* without *et*: so 1085: it is found in Cicero, as topica 27. *tamen*, as so often, implies something understood: all these, whatever they are, however much they differ, are yet of such sort as to be liable to death, whether they are *Molli lenta* or etc.: the *molli lenta* seems to refer to fire and heat, *fragosa putri* to ice and cold, *cava corp. raro* to flavour sound smell; as they are all material and would seem, where he describes them, to be of bodies severally like these: Cic. ad Att. IV 15 2 *cum illis tamen*, (i.e. even if you desert them now), *cum salvi venerint, Romae vivere licebit.* 860 *fragosa* = fragilia: a sense which the word seems nowhere else to bear. 862 *subiungere* appears to be the opposite of *seiuncta* in the preceding verse: such things must be detached, that imperishable foundations may be attached to things.

865—885: all things which have sense come from insensible elements: a visible proof of this you may see in living worms rising from the putrid earth: again grass and water change into cattle, the flesh of cattle into men, men often go to feed beasts and birds: nature turns food into what has life and sense, much as dry wood passes into flame; so much is effected by transposition and mixture and motions of elements. —That the soul, the vital principle and sense were born and died with the body in all creatures, was of course a necessary doctrine of the epicureans and is passionately asserted by Lucr. throughout the third book. 866—870 and 888 *insensilibus*: this word as well as *sensilis* seems peculiar to Lucr. among writers of authority: Arnobius his constant imitator has *insensilia.* 869 *ipsa manu ducunt*: Aen. III 372 *Ipse manu multo suspensum numine ducit*, literally: the metaphor is obvious: χειραγωγεῖν is common in the later Greek writers. 871 foll. this illustration, important from his point of view, he often repeats; see 898, 928, III 719, V 797: Aristotle and the old physiologists seem to accept it as an undoubted fact. 872 *putorem*: 929 *putor*, VI 1101 *putorem*: all of the rottenness of the earth after rain; though *putor* in Varro de ling. Lat. V 25 and elsewhere is said of a *putidus odor*: Lamb. and others would read in all these cases *putror.* 874 *itidem* i.e. inanimate things into living and sensible. 875 comp. 596 *Unde etiam fluvios frondes et pabula laeta* cet.: this justifies Lambinus' correction: the streams, the leaves and grass feed and sustain beasts, beasts feed us. 878 *pennipotentum*: this expressive word recurs V 789. 881 flame seeming to be no more like wood than a sensible to an insensible thing. *adque* B some six times, A never: it seems to have become more common in the first century and later from a false affectation of analogy: see n. to VI 92 *praescribta.* Wagner forces *adque* on Virgil in all cases, against the overwhelming testimony of mss.: Augustus however in his res gestae writes *adque* the only time he uses the word; but he also writes *aliquod* for *aliquot*, perhaps from a notion of consistency: see vol. I p. 34 and 35. 883—885 repeated in substance 1007—1009.

886—930: the mind tries hard not to believe that sense can come from what has not sense; for stones wood clods can by no mixture produce it: but, mind, it is not every element that can beget sense; only certain atoms with certain shapes and arrangements: yet even these woods and clods may, as we have seen, give birth sometimes to living things. But they who say that sense can only come from what has sense, suppose elements to be soft, as we never see sense united but with what is soft: now suppose such elements eternal; they must have the sense of some part or of the whole living thing: but no part can feel away from the whole thing: well then these elements must be like the whole living thing: if they are living then, they are thereby liable to death; but even if they are not, they would make a mere medley of living things, like the impossible unions of men and brutes: but if they lose their own sense, why then give it only to take it away? nay we have just seen that sense *can* come from what has no sense. 886 *animum percutit* seems almost proverbial: Ter. Andr. 125 *Percussit ilico animum*; Cic. ad Att. IV 8 b 3 *audivi...Romae esse hominem...percussit animum.* 887 *varios sensus* i.e. varias sententias: it is very probable that his frequent use of *sensus* with its primary meaning in this part of his poem has prompted him to use it here, rather than avoid it, in a different signification: see n. to I 875. 892 not out of all atoms alike which go to form things; but only out of certain very fine and smooth ones as proved elsewhere. 894 *quantula*, because the atoms which go to produce sense and life are of the smallest and finest kind. 896 *quae sint* i.e. qualia sint. 897 *Qu. nil rer.* = quorum nihil, a common constr.: Caes. bel. Gall. III 4 3 *quarum rerum a nostris...fieri nihil poterat*; V 1 7 *nihil earum rerum*; bel. civ. I 7 7 *quarum rerum nihil factum*; II 43 2 *quarum rerum nihil*: the opposite constr. is also common: see n. to III 184 *res ulla...quorum.* *rerum* here has of course an abstract sense, 'none of which conditions': comp. 1018 *discrepitant res*, and n. there. 901 *Conc. ita ut debent* i.e. Conc. tali concilio quali debent: at first sight you might expect *debeant*, as Lamb. suggests; but the indic. is quite idiomatic: Cic. ad Att. IV 5 1 *non est credibile, quae sit perfidia in istis principibus, ut volunt esse, et ut essent, si* cet.; VII 2 3 *adulescentem, ut nosti*, i.e. talem qualem; IX 7 A 1 Balbus says *nedum hominum humilium, ut nos sumus*; XV 4 1 *scripsi ita, ut te probaturum existimo*; Pers. V 73 *Libertate opus est, non*

hac, ut, quisque Velina Publius emeruit, scabiosum tesserula far Possidet: and so v 583 *ut est cumque*: see n. there. In I 442 I should before have kept the ms. reading *Aut erit, ut possunt*, as far more emphatic than *possint*: aut debebit esse tale, in quali possunt res esse gerique. [In this use *ut* = qualis in the widest sense, both as relative and indirect interrogative: for additional examples see Cic. Lael. 19 *ut ii fuerunt, modo quos nominavi*; epist. XIII 64 2 *magnum theatrum habet ista provincia, non ut haec nostra, ad* cet.; ad Q. fr. III 1 2 *mihi, ut est, magis placebat*; Q. Cic. ap. Cic. epist. XVI 27 1 *ea tu sine assentatione, ut erant, ad me scripsisti*; Hor. sat. II 1 54 *nil faciet sceleris pia dextera* (*mirum, Ut neque calce lupus quemquam neque dente petit bos*); Plaut. Bacch. 396 *nunc certamen cernitur, Sisne necne, ut esse oportet*: comp. also 112 *Cuius, uti memoro, rei* and Plautus quoted there. For *ut* = indirect interrogative *qualis*, see Plaut. Amph. 104 *ego vos novisse credo iam, ut* (=qualis) *sit pater meus, Quam liber...siet, Quantusque amator sit*: with this comp. Lucr. v 583: Ussing compares Ter. heaut. 436 *Non tu ei dixisti ut essem?* So *ita* or *sic* = talis: *Lucretii poemata, ut scribis, ita sunt*; Plaut. Amph. 571 *Utinam ita* (= talis i. e. ebrius) *essem*: see Ussing here: and Cic. Laelius 5 *sic enim est habitus.*] **902** foll. a hiatus is not only the simplest remedy here, as not a letter of the ms. reading has to be altered, while Lach. in 3 vss. makes 4 changes; but seems necessary for the argument: in making things sensible, they make them soft, and, *if soft, then mortal too.* **907** *esto iam*: see n. to I 968. **909** *Aut* (sensu) *simili esse putari*: comp. III 620, VI 268. **911** *alio...respicit* i. e. respicit ad animam: but the true reading is very uncertain; as is the right place of 915 (923); but I can find none more suitable than the one I have given it after Bern. **922** (921) *nequeant* is potential: comp. 986 *si potest,...queant*; v 210 *Si non...cimus...nequeant*; 648 *queant*; and n. to I 808 *possint.* **925** *quid opus*: for surely if an element first lose sense, it is the same as if it had never had it. **926** foll. *tum praeterea*: a concluding argument drawn from what we actually see going on in the world: see I 984 (998) foll. and other examples in I II III v there cited. **926** *quo fugimus* i. e. quo confugimus: Petron. sat. 132 *Ad verba, magis quae poterant nocere, fugi*, [and? Sen. rhet. I 23 *tibi quaecumque meretrix prostabit fugiet*:] this I keep, because the ms. reading is then most simply accounted for; though my former correction *vicimus* suits the context just as well, and has been adopted by Brieger. *ante* i. e. 871 foll. **927** *Quatenus* = quandoquidem: III 218 *Quatenus...Extima membrorum circumcaesura tamen se Incolumem praestat*; 424 *Quatenus est unum inter se*: see also Horace and others in Forc. for this use. **928** *vermisque effervere*: Virg. geor. IV 556 *apes...ruptis effervere costis.* **930** *ex non sensibus*, **932** *a non sensu*: comp. I 1075 *per non medium*; and n. there.

931—943: if it be said sense comes from what has not sense by a

process of change or a sort of birth, I answer, birth and change both imply a previous union: before the creature is begotten, its body cannot have sense, as its matter is dispersed abroad and has not come together in a way to awake any of the senses.—This passage is obscure: he must apparently be alluding to the stoics: Plut. de stoic. repugn. 41, of Chrysippus, τὸ βρέφος ἐν τῇ γαστρὶ φύσει τρέφεσθαι νομίζει, καθάπερ φύτον· ὅταν δὲ τεχθῇ ψυχούμενον ὑπὸ τοῦ ἀέρος καὶ στομούμενον τὸ πνεῦμα μεταβάλλειν καὶ γίνεσθαι ζῶον κ.τ.λ.: now this certainly might be termed a process of change or the effect of a sort of birth; life being the immediate consequence of the birth; but Lucr. is brief and obscure as he is doubtless alluding to writings not extant. **931** *dumtaxat*: see n. to 123. *mutabilitate*, in the unusual sense of actual change: the primary meaning is that in which Cicero uses it, tendency to change. *oriri Posse a non sensu*: IV 484 *quae tota ab sensibus orta est*; 521 *falsis quaecumque ab sensibus ortast*, will support Wakefield's *a* against *ex.* **933** *proditus*, used literally also III 587 *extra prodita corpus.* *prod. ext.*: I 625 *nullis quae praedita partibus extent*; III 929 *expergitus extat*; VI 494 *redditus extat.* **934** *Huic* cet.: he may be told that he really concedes the point that sense *can* come from what has not sense. [*plan. fac.*: lex. agrar. 64 *quod eius agri locei ita planum factum erit.*] **935** *Non fieri partum*: IV 1229 *Semper enim partus duplici de semine constat.* **935 936** so that in both cases there is a union of senseless elements previous to the reception of sense. **936** *s. conc.*: in the three other passages where *conciliatus* occurs, it signifies a union already formed; so that *sine conc.* appears to me almost synon. with *nisi conciliatum*; perhaps even more significant. **937** *Principio*: 'hic est *praecipue* (hoc autem vocabulo Lucretius non utitur) vel *in primis, ante omnia*, ἀρχήν. sic in v 92, III 119' Lach. **942** *omnituentes* formed like *omniparens* and the like. **943** *Accensi sensus*: 959 *paene amissos accendere sensus*; III 336 *accensus nobis per viscera sensus.*

944—962: a living creature receives a blow which its nature cannot endure: the senses of body and soul are stunned; the connexion of the two is broken, and the soul escapes through the apertures of the body: a blow can do no more than break up and scatter the several elements. Again the remaining vital motions can often get the better of a less severe blow, bring each thing back to its proper channel, and rekindle the senses: in this way only is the thing recalled to life. **950** *nodos*: VI 356 *Dissoluont nodos omnis et vincla relaxant.* **951** *caulas* Lucr. uses eight times in this sense, a sense quite peculiar to him; see Festus and Varro in Forc.: the word must evidently be *cavula.* *eiecit*: see n. to I 34 *Reicit*: the classical writers knew the forms *eiĕcit* or *eicit*, never *eiicit*: and so with the other compounds of *iacio*: III 513 *traiecere* mss.: Ribbeck has often restored the *e* to Virgil; and it was not unknown to Livy: see Madvig emend. Liv. p. 190; and indeed the better mss. of

almost any classical author offer examples: Cic. Marius in de div. I 106 *Abiĕcit ecflantem*; III 639 *dissicietur* mss.; this form Ribbeck's mss. sometimes restore to Virgil; see also Kempf Valer. Max. p. 282 6: Halm reads *dissice* in Cic. pro Caelio 37, and Tac. ann. I 65 M has *dissicere*; but so have the mss. of Seneca, Suetonius and others. **952** foll. the blow can only dissolve the union of the elements, not deprive them of sense, if they had it of themselves. **955** *Reliquii*, those which the blow has not stopped. *vincere...Vincere*: III 12 *aurea dicta, Aurea*; IV 789 *mollia membra movere, Mollia* cet.; V 298 *tremere ignibus instant, Instant*: 950 *lavere umida saxa, Umida saxa*; VI 528 *omnia, prorsum Omnia*: the practice is as old as Homer. **957** *quicquid* = quicque: see n. to I 289. The *suos meatus* are opposed to the *leti motum* of next v. **960** *qua re* is emphatic here and means 'in what way, if not in this'; I have therefore printed it in two words: comp. Ter. eun. 369 *Quid si nunc tute fortunatus fias? qua re, Parmeno?...capias tu illius vestem*; adel. 327 *Perii: qua re?*; Andr. 909 *qua re?*; Sall. Iug. 101 1 *undique simul speculatores citi sese ostendunt, qua re hostis adesse intellegitur*; [Cic. ad Q. fr. I 3 2 *qua re* (so M: *qua in re* Wesenb.) *peccavi scelerateque feci*; Caes. b. c. III 97 2 *qua re impetrata*; ib. 3 *qua re animadversa*; ib. 4 *qua re animadversa*;] auctor ad Heren. III 18 *statim re narrata expectat animus auditoris, qua re causa confirmari possit*; Cic. ad Att. IX 13 3 *nec ego nunc, eum iuvare qua re possim, scio*: the two last examples have *possim*, like Lucr.; and there are other instances in the auctor ad Heren. Lucr. means that it is the remaining vital motions which give back sense and life to the elements which of themselves have no sense. *leti limine*: a metaphor which he repeats VI 1157 and 1208: comp. too III 681 *vitae cum limen inimus*; culex 221 *cum te Restitui superis leti iam limine ab ipso*. **961** *possit* i.e. the *animans* of 944: possibly the ms. reading may be defended; but the change made is very slight. *conlecta mente*: Lamb. compares Cic. Tusc. disp. IV 78 *quid est autem se ipsum colligere nisi dissupatas animi partis rursum in suum locum cogere*. **962** *quo decursum*: same metaphor III 1042 *obit decurso lumine vitae*; IV 1196 *spatium decurrere amoris*: same metaphor and constr. Cic. Tusc. I 15 *nunc video calcem, ad quam cum sit decursum, nihil sit praeterea extimescendum*. *ire et abire*, a studied assonance; see n. to I 826: *abire* a euphemism for *abire e vita*: Petron. sat. 42 *abiit ad plures*: Lucr. more than once uses *ire* almost in this sense; *obire* is really similar.

963—972: there is pain when the elements are disordered in their seats, pleasure when they return to their place; therefore first-beginnings themselves can feel neither pleasure nor pain, since they are not formed of other first-beginnings, whose motions can be disturbed so as to give them pain, or rearranged so as to give them pleasure. **963** *Praeterea*: Lach. has a most obscure note; the only thing it clearly shews is that he quite fails to apprehend the poet's meaning, when he reads here *Propterea*. *dolor*, and therefore sense; pain in any thing that has sense is only a disordering of its elements. **966** *voluptas*, and therefore sense. **967** *Scire* cet.: therefore pleasure and pain being but the right or wrong ordering of elements, the elements themselves which are each one and indivisible, are formed of no elements which can be moved, so as to give pleasure or pain; and therefore they have no sense. **969** *non sunt ex ullis* cet. i.e. ipsa non constant ex ullis principiis: Lachmann's punctuation of this v. and explanation of the whole passage is to me quite incomprehensible; he must have quite misunderstood both sense and construction here. *sunt ex*: I 61 *ex illis sunt omnia primis*; II 458 *Si minus omnibu' sunt e levibus atque rutundis*; Cic. orator 215 *creticus qui est e longa et brevi et longa*.. *Nam* (paean) *aut e longa est et tribus brevibus*.. *aut e totidem brevibus et longa*...*Est* (spondeus) *e longis duabus*...*Ne iambus quidem, qui est e brevi et longa*...*aut etiam dactylus qui est e longa et duabus brevibus*. **970** *quorum* cet. i.e. ut dolorem capiant novitate motus eorum; see n. to V 873 *quare*. *motus* is of course the gen. **972** *Haut igitur* cet. because pain and pleasure are sense. The argument may really be a begging of the question, but is perfectly intelligible: these vss. too, 963—972, clearly form a new paragraph quite distinct from the former: we might compare with them the famous saying of Hippocrates de nat. hom. 2 ἐγὼ δέ φημι, εἰ ἓν ἦν ἄνθρωπος, οὐδέποτ' ἂν ἤλγεε· οὐδὲ γὰρ ἂν ἦν ὑφ' ὅτου ἀλγήσειε ἓν ἐών.

973—990: if sense must be given to the elements of living things in order that these things may have sense, then must their elements have the same feelings and reasoning powers which men have; they will thus have to consist of other elements, and these again of others on to infinity: if all this is absurd, and you cannot conceive laughing or thinking atoms, why not allow generally things that have sense to come from elements without sense?—See what is said on I 919 920: Mr Poste observes that, as among the ὁμοιομερῆ Aristotle, and prob. Anaxagoras, included the sensories, this may account for Lucr. introducing the subject a second time, when he is treating, as here, of the sensories. **974** *si iam*: see n. to I 968. **975** *propritim*, another ἅπαξ λεγόμ.: on these adverbs see n. to I 20 *generatim*; but the form is curious, as analogy would lead us to expect a form *proprītus*. The argument is, if sense generally must come from sense, then the special sense of man should come from elements specially endowed with similar sense, the power of laughing, crying, thinking. In this paragraph Lucr., as his wont is, clinches so to speak his refutation of the doctrine that sense must come from sentient elements, by a sarcastic appeal to common sense. **976 977** comp. I 919 920, in substance the same. **976—984** Mr Poste says 'the answer to the query would be very easy on the theory of Anaxagoras: he held the divisibility of matter including τὸ ὁμοιομερές

ad infinitum, and would reply to the querists, your elements are just like yourselves and bear the same relation to you that you do to the massive sensories of the animals that walk the earth. But talking and speculating de rerum natura are functions of the multiform compound, τὸ ἀνομοιομερές, the rational animal; not of any of his component organs in isolation.' **978** *rerum mixtura*, the way in which the elements of things are mixed to form these things. **979** *proporro*: see n. to v 312. **983** *sequar...ut sit*: *sequar* seems to have the pregnant sense of pressing the adversary and requiring him to admit, *insequar et flagitabo ut*: comp. I 980 *Hoc pacto sequar atque...quaeram*. **987** *doctis...dictis* recurs v 113: Virg. catal. 7 9 *Magni petentes docta dicta Sironis*, of his epicurean master; Enn. ann. 274 *Haud doctis dictis certantes, sed maledictis*: Plautus has *docta dicta, dicta docta* and *dictum doctum*; *dolis doctis*, etc. **988** *Non ex sem.* (factus). **990** *undique* = omnino: Cic. de fin. v 69 *honestatem undique perfectam atque absolutam*.

991—1022: nay we men, as well as beasts and the fruits of the earth, may be said to have our birth from heaven as father, and earth who as mother gives us food and therefore life: death too is but the going back of our elements to heaven and earth respectively: then in a moment all forms and colours and senses perish, which depend on the motions arrangements etc. of first-beginnings; even as in this our poem a few letters produce by different arrangements, etc. quite different verses.—The first part of this passage is a literal translation of a fragment from the Chrysippus of Anaxagoras' scholar Euripides, Γαῖα μεγίστη καὶ Διὸς αἰθήρ, Ὁ μὲν ἀνθρώπων καὶ θεῶν γενέτωρ, Ἡ δ' ὑγροβόλους σταγόνας νοτίας Παραδεξαμένη τίκτει θνητούς, Τίκτει δὲ βορὰν φῦλά τε θηρῶν, Ὅθεν οὐκ ἀδίκως Μήτηρ πάντων νενόμισται. Χωρεῖ δ' ὀπίσω Τὰ μὲν ἐκ γαίας φύντ' εἰς γαῖαν, Τὰ δ' ἀπ' αἰθερίου βλαστόντα γονῆς Εἰς οὐράνιον Πάλιν ἦλθε πόλον· Θνήσκει δ' οὐδὲν τῶν γιγνομένων, Διακρινόμενον δ' ἄλλο πρὸς ἄλλου Μορφὴν ἑτέραν ἀπέδειξε: it is translated by Vitruvius too at the beginning of his 8th book: *Euripides auditor Anaxagorae, quem philosophum Athenienses scaenicum appellaverunt, aera et terram eamque e caelestium imbrium conceptionibus inseminatam fetus gentium et omnium animalium in mundo procreavisse*, and so on: comp. I 250 and what is said in illustration of that similar passage about the antiquity of the doctrine that heaven is the father and earth the mother of all things. Arist. de plantis I 2 p. 817 27 expressly states that Anaxagoras taught ὅτι ἡ γῆ μήτηρ μέν ἐστι τῶν φυτῶν, ὁ δὲ ἥλιος πατήρ: Euripides repeats the same sentiment in a fragment of the Melanippe worth comparing. The whole of our passage is quite epicurean and consistent with the general argument of Lucr. though his fondness for Euripides has made him express himself in the language of Anaxagoras; with whom however as we have shewn in the first book he and Epicurus had many points of contact, points which are well brought out here. What

Lucretius means to say in his poetical language is this: so far from men and other animals requiring special sensible elements, they like every thing else on earth come from the mingling of the elements of ether and earth; and at their death these senseless elements return whence they came, to be employed afresh in producing other things: the elements are the same, it is only their motions arrangements etc. which make the difference: he then adds his favourite illustration from the letters of the alphabet. I should not say, as Zeller does from this single passage, 'hence Epicurus shares the stoic belief in a divine origin of the human race.'

991 *oriundi*: a very rare example of *i* altogether suppressed, with scarcely a parallel in the hexameter poets: *abiete ariete abiegni fluviorum principium consilium* and the like, where *i* has the power of a consonant, are common enough; but for instances like ours Lach. in his learned note has to go to the old scenic poets; and his examples are vehemently controverted by Ritschl prisc. Latin. epigr. suppl. III p. XXI: but L. Mueller de re metr. p. 249 gives *dŏmĭniă* from Lucilius, *opĕriuntur* from Laevius, *mĕlius* from Varro, as instances of *i* wholly suppressed, as here. **996** *Pabula cum praebet*: it is said to give birth to man and beast by giving them food, without which parent first and then child could not exist a moment. The poet strives to find sufficient pretext for calling earth mother. **999—1001** quoted by Lactant. inst. VII 12, who taxes Lucr. with inconsistency, 'sed victus est veritate'. **999** *Cedit* cet.: Ὅθεν δ' ἕκαστον εἰς τὸ σῶμ' ἀφίκετο, Ἐνταῦθ' ἀπελθεῖν, πνεῦμα μὲν πρὸς αἰθέρα, Τὸ σῶμα δ' εἰς γῆν, says Eur. suppl. 533, or else Moschion: Epich. p. 258 Lorenz Συνεκρίθη καὶ διεκρίθη κἀπῆλθεν ὅθεν ἦλθεν πάλιν, γᾶ μὲν εἰς γᾶν, πνεῦμα δ' ἄνω: but Anaxag. himself, fr. 8 Schorn and Mullach, τὸ μὲν πυκνὸν καὶ διερὸν καὶ ψυχρὸν καὶ τὸ ζοφερὸν ἐνθάδε συνεχώρησε, ἔνθα νῦν ἡ γῆ· τὸ δὲ ἀραιὸν καὶ τὸ θερμὸν καὶ τὸ ξηρὸν καὶ τὸ λαμπρὸν ἐξεχώρησε ἐς τὸ πρόσω τοῦ αἰθέρος. **1001** *rellatum*; but v 686 *rĕlatus*: corp. inscr. 200 81 *rellatum*, and Ter. Phorm. 21 [and Accius Didascalicon II 1 2 Mueller]: IV 761 he seems to have written *Rellicta*; which is lengthened by Lucilius also: *religio relicuus* stand of course on a different ground, as the verse requires the first syll. to be long: see n. to I 560. **1002** foll. hear Anaxagoras himself frag. 17 Schorn and Mullach, 22 Schaubach, τὸ δὲ γίνεσθαι καὶ ἀπόλλυσθαι οὐκ ὀρθῶς νομίζουσι οἱ Ἕλληνες· οὐδὲν γὰρ χρῆμα οὐδὲ γίνεται οὐδὲ ἀπόλλυται ἀλλ' ἀπὸ ἐόντων χρημάτων συμμίσγεταί τε καὶ διακρίνεται. καὶ οὕτως ἂν ὀρθῶς καλοῖεν τό τε γίνεσθαι συμμίσγεσθαι καὶ τὸ ἀπόλλυσθαι διακρίνεσθαι, an aphorism which Epicurus might have wholly adopted. **1004** *et effit ut omnes res ita* i.e. et ita fit ut omnes res cet. *effiant* occurs VI 761, *effieri* Plaut. Persa 761: Lucr. has also *confieri* often and *interfieri* more than once: with *effit ut...ita* comp. IV 944 *fit uti pars inde animai Eiciatur* i.e. inde fit uti cet.; VI 204 *Hac etiam fit uti de*

causa; 727 *Quo fit uti pacto.* **1005—1012** comp. I 767 and what precedes and follows. **1007—1009** have already occurred in substance three times: see n. to 760 foll.: they express one of the most essential of the epicurean doctrines. **1010** *penes...Corpora prima*: comp. Ulpian in Forc. *penes te amplius est quam apud te; nam apud te est quod qualiter qualiter a te tenetur; penes te est quod quodammodo a te possidetur*: [see too Draeger hist. synt. I p. 544 § 254 2.] *residere* is also an emphatic word, to be abiding, inherent: see Cic. in Forc. s. v. **1011** *quod in summis* cet. i.e. the *formae colores sensus* of 1005 1006. *in summis* contrasts with *penes*, *fluitare* with *residere*. **1013** foll. this illustration we have had again and again in words more or less like: comp. especially I 823 where *Quin etiam* introduces it and connects it with what precedes exactly as here. **1018** *discrepitant res*: VI 1105 *quia longe discrepitant res.* Observe the vagueness of *res* here, the things or results which come from the different arrangements of letters, i.e. the words and verses; whereas in the very next words *Sic ipsis in rebus* and 1022 *res*, *res* has its proper sense of material things brought into comparison with the former *res* or words; so careless is he in such matters: see n. to I 875. **1021** occurred I 685.

1023—1047: listen now to a question of vast moment. But nothing is so easy that it may not at first seem difficult; nothing so wondrous but people cease in the end to admire it. Look at the sky with sun moon and stars: what more marvellously beautiful? yet the world weary of the sight cares not now to give it a glance. Fear not therefore the novelty of the thing, but hear what I have to say; and if it be true, surrender; if false, gird yourself to the combat: the mind would fain comprehend that immensity into which it looks and in which it freely expatiates. **1024** *nova res*, that which he enters upon in the next paragraph, viz. innumerable worlds in the immensity of space. *ad auris Acc.*: Cic. pro Sest. 107 *ad populi Romani aures accidisse*: in Vatin. 4 *ad aures tuas accidat.* **1029** as *Quod mirarier* may be looked upon as an accus.: see n. to I 331: the expression does not seem harsher than Ter. Andr. 392 *nec tu ea causa minueris Haec quae facis*; hec. 616 *Sed non minuam meum consilium.* **1034** *nunc si...si nunc*: comp. V 332 *etiam quaedam nunc artes expoliuntur, Nunc etiam augescunt*; Cic. ad Q. fratr. I 3 *ego tibi irascerer, tibi ego possem irasci*; Ovid met. I 111 *Flumina iam lactis, iam flumina nectaris ibant*; Juv. VI 157 *hunc dedit olim Barbarus incestae, dedit hunc Agrippa sorori.* **1035** *poterat*: this use of the indic. is common enough: see Madv. Lat. gram. 348 c. **1038** *Quam tibi iam nemo .. dignatur*: Lach. to IV 1203 *quam saepe*, cites for this use of *quam* also I 104, VI 801, 1080: comp. Cic. ad Att. IX 11 2 *quam ille haec non probare mihi quidem visus est! quam illam νεκυίαν .. timere!* *nemo, fessus* = nemo, adeo omnes fessi sunt, is idiomatic enough; III 607 *Nec sibi enim quisquam moriens sentire videtur,... Verum deficere* cet.; IV 610 *cernere nemo Saepem ultra potis est, at voces accipere extra*; [Mart. IX 79 7.] *satiate*: this form recurs V 39 and 1391; it is found also in prose, in Livy Pliny and others. **1041** *Expuere* cet.: still bolder is its application in Ter. eun. 406 *Quasi ubi illam exspueret miseriam ex animo.* **1043** *Dede manus*: *da manus* is the usual expression; but comp. VI 1255 *paupertate et morbo dedita morti*; [Plaut. asin. 601 *me morti dedere optas?*] So *dede neci* in Virg. geor. IV 90, Ov. her. XIV 125 and fasti IV 840; Tib. I 3 7 *cineri quae dedat odores*; Cic. pro Arch. 26 *aures suas dederet.* [Comp. also Calpurn. III 70 *Quodsi dura times etiam nunc verbera, Phylli, Tradimus ecce manus.*] *falsum* is used for a substantive, as in III 525 *convincere falsum*; IV 764 *Nec possunt falsum veris convincere rebus*: Ov. am. III 14 41 *nec quae celare parabis Insequar, et falsum muneris instar erit*: [but perhaps for *falsum* we should read *falli*: see Madv. adv. II p. 70:] comp. IV 813 *semotum fuerit longeque remotum.* With what precedes comp. the very similar language of the stoic in Cic. de nat. deor. II 96 *quod si hoc idem ex aeternis tenebris contingeret ut subito lucem aspiceremus, quaenam species caeli videretur? sed adsiduitate cotidiana et consuetudine oculorum adsuescunt animi neque admirantur neque requirunt rationes earum rerum quas semper vident, proinde quasi novitas nos magis quam magnitudo rerum debeat ad exquirendas causas excitare*; yet just above he says of Lucr. and his school *certe ita temere de mundo effutiunt, ut mihi quidem numquam hunc admirabilem caeli ornatum .. suspexisse videantur*: such different conclusions may be drawn from the same phenomena. Comp. too the auctor ad Heren. III 36; and Sen. nat. quaest. VII 1. **1047** *animi iactus*: see n. to 740 *animi iniectus*; and comp. Cic. de nat. I 54 *cuius* (dei) *operam profecto non desideraretis, si inmensam et interminatam in omnis partis magnitudinem regionum videretis, in quam se iniciens animus et intendens ita late longeque peregrinatur, ut nullam tamen oram ultimi videat in qua possit insistere.* The argument could dispense with these last four vss. and their style appears to me to have something constrained in it. I am disposed to look upon them as one of those subsequent additions of the poet, of which I have spoken above vol. I p. 28 foll., and elsewhere.

1048—1066: space then being unlimited on all sides and atoms infinite in number, it is not likely this world should be the only one in being, since it was formed by a mere chance combination of atoms: there are then in other parts of space other like combinations of matter. **1050** *res ipsaque*: Lucr. often has *que* in the third place, not only with prepositions and their cases, even dissyllabic prepos. as V 1205 *super stellisque*: but in other instances, as here and 48, III 662, 939, 962, IV 273, 824 *errorem vitareque*, 1010 *persectantes visaeque*, V 680, VI 957, 1007, 1085; also IV 79 and 104 by I think probable corrections: with some

poets this usage is common enough: comp. Catul. 57 2 *Mamurrae pathicoque*; Cic. de div. I 20 *Templa deumque*; Tib. I 10 51 *Rusticus e lucoque*; Ovid fasti II 177 *furit Iuno, formam mutatque puellae*; met. II 89 *dum resque sinit*; VII 204 *sua convulsaque robora terra*; X 143 *inque ferarum Concilio medius, turba volucrumque sedebat*; her. XX 226 *Amplius utque*; and the frequency with which these two poets put it in the 2nd half of the pentameter: Sen. Oct. 361 *ereptam pelagoque*; 363 *ingens geminatque nefas*: Virgil on the contrary has *que* in the third place only with monosyl. prepos. and their cases and with *iamque namque* according to Wagner geor. I 142: II 1099 Lucr. has *ve* too in the third place, *Omnibus inve locis*, and IV 616 *plus operaere*: comp. Hor. od. IV 2 21 *Flebili sponsae iuvenemve.* Perhaps Lucretius' carelessness in the position of *quoque* is like in principle; see n. to V 192: *itaque, igitur, enim* he also often puts late in the sentence; see n. to I 419. On the other hand it is to be noted that, like the older poets generally, he always has the copulae *et, nec, nam* in the first place; while Virgil and the later poets often transgress this rule. **1051** *elucet* thus coupled by a simple *et* with *docui* and *vociferatur* is somewhat awkward: one would have expected a word meaning 'to make clear.' **1053** *Undique vorsum*: 188 *Sursus enim versus*: see Forc. for similar instances from Cicero Caesar and the best writers, *deorsum versus, utroque vorsum, quoquoversus* and the like: Gellius XII 13 20 has *undique versum.* **1054** *innumero numero*: 1086 *sed numero magis innumerali*; III 779 *Innumero numero*; VI 485 *Innumerabilem enim numerum*; Plautus in his own epitaph, *Et numeri innumeri simul omnes collacrumarunt*, which Ritschl parergon p. 42 refers to the great variety of Plautus' metres: *in number numberless* and *numbers numberless* are common in our old writers: not unlike are *innuptae nuptiae, mentes dementes, iniustaque iusta* of other poets; and similar in effect are I 98 *casta inceste*, III 869 *Mortalem vitam mors cum inmortalis ademit*, V 121 *Immortalia mortali sermone.*—With the above vss. comp. Cic. de nat. deor. I 54 *in hac igitur inmensitate latitudinum longitudinum altitudinum infinita vis innumerabilium volitat atomorum* cet. **1058** *natura*, by natural causes, not by divine power or necessity. **1059** verses like this apparently wanting a caesura are not uncommon in Lucr. and other poets: comp. VI 197 *Conplerunt, magno indignantur murmure clausi*; in three other instances, III 612 715, V 165, the word *inmortalis* occurs; so that in our verse and all the others it may be presumed that the preposition of the compound formed a quasi caesura; for in fact the Latins seem to have made no difference in sound between *in mortali* and *inmortali*: Lucilius ventures to write *Scipiadae magno improbus obiciebat Asellus*; and Horace *Vestrum praetor, is intestabilis et sacer esto*; and in the new corp. inscr. Lat. we find on the one hand *ab iuraverit, ad tribuere* 7 times, *ex actum, in doucimus* and many such like; on the other hand *aquo, amatre, adeum, desuo, ex-*

formula, inmanu, obeas and a hundred such like. There is one other instance, III 258, *Nunc ea quo pacto inter sese mixta quibusque*, where the v. may have prompted a Latin to pronounce *interse se.* Lachmann's distinction between a short vowel as in *forte*, and a long vowel as in *magno* or an *m* as in *quid enim inmortalibus*, so that our present verse shall not be a legitimate one, appears to rest on no reason. **1060** *tem. inc. fr.*: comp. V 1002 *temere incassum frustra mare saepe coortum*; VI 319 *Nec temere omnino plane*: he delights in these poetical tautologies, for in their application here these words are synonymes: but before him Cic. Arat. 32 *Sed frustra temere a vulgo ratione sine ulla.* **1061** *colarunt*, have strained as through a *colum* the atoms fitted to unite: this word is well illustrated by N. P. Howard, Journ. of phil. I p. 129, from the Greek: Epic. in Diog. X 73 τοὺς κόσμους δεῖ καὶ πᾶσαν σύγκρισιν πεπερασμένην...νομίζειν γεγονέναι ἀπὸ τοῦ ἀπείρου, πάντων τούτων ἐκ συστροφῶν ἰδίων ἀποκεκριμένων κ.τ.λ.: he compares too the ὥσπερ διαττώμενα (σώματα) of Diog. IX 31 with respect to Leucippus: V 422—431 should be compared with this passage, both in their general agreement with it and partial divergence. *quae coniecta*: 1108 *Semina quae magnum iaculando contulit omne.* **1062** *exordia* here and V 430 has precisely the same force as Virg. ecl. VI 33 *ut his exordia primis Omnia* cet. i.e. the rudimentary formations of earth sea heaven etc. **1066** *avido* cet.: V 470 *Omnia sic avido complexu cetera saepsit.* There are not only other worlds, but innumerable other worlds, as he proves in the next paragraphs: with this and what follows comp. Epic. himself in Diog. Laert. X 45 ἀλλὰ μὴν καὶ κόσμοι ἄπειροί εἰσιν, εἴθ' ὅμοιοι τούτῳ εἴτ' ἀνόμοιοι.

1067—1076: nay when there is matter and place ready, and nothing to hinder, and countless atoms with the same powers as those which have formed our world, you must admit that there are other worlds with men beasts etc.—A mere variation of the last paragraph. **1069** *confieri*: this form recurs several times: see also n. to 1004. **1070** *et*, **1072** *que*: *et* followed by *que* is rare, but is found Hor. sat. I 3 139 and even in Cicero: see de fin. V 64 and Madvig who there quotes other instances: and in Livy, as XXXVIII 38 12 *et ex iis praesidia deducito, utique recte tradantur curato*: but the reading is of course uncertain. *si tanta*, and that this is so has been proved. **1072** *Visque eadem et natura manet*, and there is no conceivable reason for questioning this. Comp. with the above Epic. l. l. αἵ τε γὰρ ἄτομοι ἄπειροι οὖσαι, ὡς ἄρτι ἀπεδείχθη, φέρονται καὶ πορρωτάτω· οὐ γὰρ κατηνάλωνται αἱ τοιαῦται ἄτομοι ἐξ ὧν ἂν γένοιτο κόσμος ἢ ὑφ' ὧν ἂν ποιηθείη, οὔτ' εἰς ἕνα οὔτ' εἰς πεπερασμένους, οὔθ' ὅσοι τοιοῦτοι, οὔθ' ὅσοι διάφοροι τούτῳ.

1077—1089: again there is nothing that is sole in its kind, man beast bird or fish; and so is it also with heavens earths seas suns and

moons; they are all without number; since they have all birth and death on the same conditions as each thing here on earth. **1077** foll. comp. the very similar argument in 532 foll. Epicurus' friend Metrodorus in Plut. de plac. phil. I 5 says pointedly ἄτοπον εἶναι ἐν μεγάλῳ πεδίῳ ἕνα στάχυν γεννηθῆναι καὶ ἕνα κόσμον ἐν τῷ ἀπείρῳ. **1080** *in primis anim.* = primum in animalibus: comp. IV 478 *primis ab sensibus* and the like: this use of the adj. *primis* is very common in the poets, esp. Virgil: see Wagn. quaest. Virg. XXVIII 3 b and 4 and 6: see n. to III 250 *postremis datur ossibus* postremo datur oss.; quite the same in principle is II 217 and 226 *rectum per inane*, where see note. *inclute Memmi* recurs V 8: comp. Emped. 439 κλυτὲ κοῦρε Θεανοῦς Πυθαγόρεώ τε. **1086** *num. innum.*: see n. to 1054. **1087** *depactus terminus alte*: the sense and metaphor are the same as those of the often recurring *alte terminus haerens.* **1089** *genus omne*, whether men beasts birds or fishes: *hic* i.e. in this earth. *generatimst abundans*: III 396 *est animus .. coercens.* Lach. quotes Manil. I 858 *Ignibus usque adeo natura est omnis abundans*: comp. also V 389 *Has erit et similis tribuens olor aureus artes*; 397 *Quisquis erit tali cupiens sub tempore vitam*: and see Draeger hist. syntax § 142. **1087—1089** the argument seems to be, since all these things are mortal and had a beginning, they must be subject to the same conditions as other mortal things: in fact, as repeated by Plutarch Cicero and others, Epicurus taught that innumerable worlds were daily coming into being and daily perishing.

1090—1104: the knowledge of these things will rid you of fear of the gods; for how could any being rule these numberless heavens and earths? how could he hurl his bolts at once in so many places, bolts which often destroy the innocent and miss the wicked? **1090** *si teneas*: see note to I 327. **1092** *sua sponte*: though Lucr. elsewhere and the poets generally for obvious reasons say *sponte sua*: *sua sponte* is the common order in prose: yet Augustus in his res gestae V 4 and Livy XXVII 11 3 have *sponte sua*: [see Draeger hist. synt. I p. 519 f.] *dis expers*: VI 1181 *expertia somno*: he oftener has the gen. which became the regular constr.: Sall. Cat. 33 1 *plerique patriae, sed omnes fama atque fortunis expertes sumus*: [see Ussing to Plaut. Amph. 706.] It is worth comparing these vss. and the cognate passages such as V 86 foll. VI 62—79, also III 14 foll., V 8 *deus ille fuit deus*, with Cic. Tusc. disp. I 48 *soleo saepe mirari nonnullorum insolentiam philosophorum qui naturae cognitionem admirantur eiusque inventori et principi gratias exultantes agunt eumque venerantur ut deum; liberatos enim se per eum dicunt gravissimis dominis, terrore sempiterno et diurno ac nocturno metu. quo terrore? quo metu? quae est anus tam delira quae timeat ista, quae vos videlicet, si physica non didicissetis, timeretis?* But Lucr. was no haruspex: he meant what he said, and thought that others did the same. Cicero's philosophical works were all written within a few years after

this poem was published, and they afford many proofs that Cicero was familiar with its language: it was not his usage to quote the actual words of contemporaries, profuse as he is in his citations from the older writers. **1093—1104** are very similar to the longer passage VI 387—422. **1095** *profundi* is a subst. agreeing with *immensi*: see n. to I 1002. **1096** *Indu*: see n. to I 82. *moderanter* a ἅπαξ λεγόμ.: *moderanter habere habenas* = moderari habenas: [comp. Cic. Lael. 45 *quam laxissimas habenas habere amicitiae.* 'moderanter: Lucr., Nouat. Trinit. 3, id. ib. 29 *ad decreta ipsius se moderanter temperare*,' Mélanges Gr. Rom. III p. 476.] **1097** *caelos* in the plur. to express all the different heavens in the universe, just as *we* translate the *terras* of the next v. by 'earths' for a like purpose; otherwise the plur. is quite unknown to classical writers: Serv. Aen. I 331 *secundum Epicureos qui plures volunt esse caelos*: Ennius has *caelus profundus*, shewing that the sing. was once both masc. and neut. as in the case of so many other nouns. [Arnob. III 9 has *innumeros caelos*: Trimalchio in Petron. 39 says *caelus hic* and *totus caelus.*] *caeli* for *caelum* was a hebraism of the Church writers. With *caelos* comp. IV 291 *aeribus binis*, V 645 *aeribus.* **1098** *suffire* seems to have the sense of 'to warm' here only: IV 1175 *se suffit odoribus*, it has its proper force. **1100** *caeli serena* is opposed to the *nubibus*: the *sonitus* arises in the *nubibus* and shakes the *caeli serena* at a distance; for VI 99 *Nec fit enim sonitus caeli de parte serena*, and so 400 foll.: with this compare VI 96 *Principio tonitru quatiuntur caerula caeli Propterea quia concurrunt sublime volantes Aetheriae nubes*; comp. too 285 *Quem gravis insequitur sonitus, displosa repente Opprimere ut caeli videatur templa*, and 387 *Quod si Iuppiter atque alii fulgentia divi Terrifico quatiunt sonitu caelestia templa*: the *sonitus* or thunderclap is confounded with the thunder itself; as in Ter. eun. 590, imitated by Lucr., *At quem deum! qui templa caeli summa sonitu concutit.* **1101** *et aedis* cet.: comp. VI 417 foll. and Cicero cited there, whom Lactant. inst. III 17 compares with our passage: *in libris consulatus sui eadem dixit quae Lucretius*, Nam pater cet. **1102** *in deserta recedens*: comp. VI 396. **1103** *quod saepe* cet. enlarged upon VI 390—395. **1104** Seneca nat. quaest. II 46 is asked by the epicurean Lucilius *quare Iuppiter aut ferienda transit aut innoxia ferit?* and prudently evades the question.

1105—1174: and after our world was born, many elements were ever added to it so as to increase all its parts, until it attained its full growth: even thus things which you see growing take in more elements as food than they give forth, until they reach their maturity; then they gradually decay, and exhale more than they take into their veins; until from inward rarefaction and outward blows they perish completely: even thus will our world perish: already our earth has begun to fail, and can no longer produce what once it did; tillers and vinedressers spend their labour in vain and regret the olden time, not knowing that the earth

like everything else must come to its end. **1105** *Multaque* cet. is a continuation of the argument broken off at 1089, especially of that contained in 1058—1063, the intervening vss. 1090—1104 containing one of his many impassioned appeals. *diemque Primigenum—coortum* is a mere poetical repetition of the preceding words. **1106** *Primigenum* is a rare word, for which lexicons only cite Avienus besides Lucr.: perhaps he wished to translate the Homeric πρωτόγονος. **1107** *corpora* and *Semina* are of course synonymes. **1110** *Appareret*: I find no other example of the use of this verb which is here very expressive: Faber compares the Greek προσκτᾶσθαι. *caeli domus*: VI 358 *Concutitur caeli domus*: he may have been thinking of Ennius' strange *divum domus altisonum cael.*: Aen. X 1 *domus omnipotentis Olympi*: but Lucretius' expression implies more: Hor. od. II 12 8 *Fulgens contremuit domus Saturni veteris.* **1111** *consurgeret*: one can hardly say whether this is simply for *surgeret*, or, what is more graphic, for *undique circum surgeret*, or even *surgeret una cum caelo.* This formation of our world is much more fully delineated V 449—508: above, 1058—1063, he described the *exordia* of this world; here he pictures its completion. **1112** *plagis*: these blows of atoms are, as we have so often seen before, the chief cause of the formation and conservation of things, by enabling the atoms to clash and try all kinds of union, until some suitable one is found. **1114** *umor, terra, ignes, aether* are used here loosely and poetically for the elements fitted by their shape etc. to assist in forming water earth etc. **1115** *procudunt*, as III 1081 *Nec nova vivendo procuditur ulla voluptas*; V 850 *propagando procudere saecla*; 856 *propagando procudere prolem.* *aetheraque aether*: for *aeraque aer*, since the poet here employs Empedocles for his own purpose, just as 991 foll. he made use of Anaxagoras and Euripides: Emped. 270 πυρὶ δ᾽ αὐξάνεται πῦρ, Αὔξει δὲ χθὼν μὲν σφέτερον δέμας αἰθέρα δ᾽ αἰθήρ: in form his vss. are rather a reminiscence of the more famous 321 Γαίῃ μὲν γὰρ γαῖαν ὀπώπαμεν ὕδατι δ᾽ ὕδωρ Αἰθέρι δ᾽ αἰθέρα δῖον, ἀτὰρ πυρὶ πῦρ ἀίδηλον: elsewhere too Emped. thus uses αἰθήρ, as 105 Πῦρ καὶ ὕδωρ καὶ γαῖα καὶ αἰθέρος ἤπιον ὕψος, and 216. Lucr. has probably only followed Empedocles here; but see n. to I 250 *aether*, where it is shewn that he sometimes uses the word strictly, sometimes for the upper regions generally and the seat of rain: thus in one place he has *aetheriae nubes*, in another *innubilus aether*, in a third *aetherias auras.* **1116** *Donique*: this form of *donec* recurs V 708, 723, 997, always before a vowel: Lucr. may in one or other place have written *doneque*, which in one place, V 708, A pr. m. exhibits. See too Val. Rose in Hermes II p. 468, who there and in his edition restores to Vitruvius *doneque* four times for the *denique* of mss.; but he does not state the case quite fairly between *donique* and *doneque*, our oldest authority, an inscription, having as Huebner shews, *donique.* He quotes however three instances of *doneque* from Tischendorf's cod. Palat. of the oldest version of the Gospels, the Amiatinus etc. substituting *donec.* Vitruv. IX 1 11 has *donique cum* = donique = donicum which occurs several times in Plautus. *perfica* = perfectrix: a goddess *Perfica* is mentioned by Arnobius. **1119** *venas* seem here and elsewhere to include the arteries as well as veins. **1121** *refrenat*: a favourite word of his. **1122** *adauctu*, used by Lucr. alone of good writers. **1126** *dispessa*: see notes 1: it must agree with *quaecumque*, and refer to things which have attained the fulness of their growth: the atoms are *dispersa*, but not the *res*: for form comp. Gellius XV 15 *Plautus in milite glorioso* (360) a *littera in* e *mutata per compositi vocabuli morem* dispessis *dicit* cet. **1127** *vescitur* is quite suitable here: eats, i.e. takes in as food. **1129** *manus dandum est*: see n. to I 111: the infin. after *manus dandum est* would seem like the infin. after *Confugient* in III 765. **1133** *res amplior...et latior*, with reference to 1126 *dispessa*: for involved arrangement of words see n. to III 843. **1135** *modo* has reference, as Lach. says, to *augmine adempto*; but *modo* used of present or future time is rare: see Forc. who quotes Ter. ad. 289 *modo dolores, mea tu, occipiunt primulum*, and the remark of Donatus *evidenter hic* modo *temporis praesentis adverbium est*: comp. also Livy XXVI 15 13 *modo prohiberi etiam se, si id vellet, senatus consulto diceret.* *modō*, as IV 1181 *Una modō*: it is also long, as Lach. shews, in Plautus Terence Lucilius and Cic. Arat. frag. 8 *Huic non una modo caput.* *dispargit*: III 539 and IV 895 *dispargitur*; III 661 *conspargere*; V 371 *exspargi*; VI 525 *aspargine*: II 33 *conspergunt* mss. of Lucr.; but Macrob. sat. VI 2 *conspargunt*, perhaps rightly: Lucr. has also *contractans*, etc.; Augustus, somewhat of a purist in such matters, twice in his res gestae writes *consacravi.* **1137** *proquam*: III 199 *parvissima corpora proquam...ita*; VI 11 *proquam posset*: the word seems not to be found out of Lucr.: Lach. to VI 11 'aeque Latina sunt *pro ut, prae ut, pro quam, prae quam*, neque ab his differunt *praeter quam, post quam, ante quam, super quam*'. **1138** *tantum* answers to *proquam*, as III 200 *ita.* **1139** *cibus, cibus, cibus* may be compared with the instances given in n. to 955 *vincere saepe, Vincere*: the designed effect is the same, to obtain emphasis by iteration. **1140** *fulcire cibus*: Hor. sat. II 3 153 *Deficient inopem venae te, ni cibus atque Ingens accedit stomacho fultura ruenti*; Sen. epist. 95 22 *dare cibum saepius et vino fulcire venas cadentes*; 68 *alius frequenti cibo fulcit.* **1144** *omnia*: see n. to I 15 *capta...quamque.* **1146** *tuditantia* = crebro tundentia, and recurs III 394: Enn. ann. 138 *tuditantes.*

1148 *Sic igitur* cet.: the world will have the fate of all mortal things: it has attained its full growth and begun to decay, and must finally perish.—A new paragraph ought not to commence here; as the preceding illustrations have been merely given with reference to this, and it is a direct continuation of the argument of 1105 foll. more especially of 1116 foll. from which it cannot be separated. **1149** *Expugnata* cet.: keep-

ing up the metaphor of the *moenia*, which expression has been explained in I and will be further illustrated in V. *dabunt labem, ruinas*: see n. to IV 41: *dare ruinas* occurs several times in Lucr. for *ruere*; *labem* appears to be here used in its primary sense of the sinking and giving way of the ground. **1150** foll. Martha p. 346 argues that this picture of the world and its products may have been suggested to Lucr. by the wretched state of Italy, the decay of agriculture, etc. **1150** *Iamque adeo*: *adeo* strengthens the *iam*, even now, now already; it is a favourite expression of Virgil: Wagner quaest. XXVI 4 cites Aen. II 567, V 268, 864, VIII 585, XI 275, 487. **1151** *anim. parva*: the *vermiculi* and the like, referred to more than once above; comp. too V 797 *Multaque nunc etiam existunt animalia terris Imbribus et calido solis concreta vapore. quae cuncta* cet. as told at length V 780 foll. **1152** *dedit...partu*: Aen. I 274 *geminam partu dabit Ilia prolem.* **1153** *superne*: a favourite word of Lucr., generally with him meaning 'overhead': here and in one or two other places it has the force of *desuper*: in Livy it frequently has the same sense, as XXIV 39 4, 47 3, XXVIII 3 7, XXX 10 13; and Sen. dial. I 2 1; Suet. Tib. 39. **1154** *Aurea...funis*: Gellius XIII 21 (20) 21 *Lucretius aeque auribus inserviens* funem *feminino genere appellavit in hisce versibus* Haut cet. *cum dicere usitatius manente numero posset* Aureus e caelo cet.: see too Quintil. inst. I 6 6. Lucr. alludes no doubt to the σειρὴ χρυσείη of Homer, but probably also to some stoical allegorising of the same: we know from Marcus Aurel., Eustathius p. 695 at beg. and others that the stoics connected it with their εἱμαρμένη; and Themistius orat. 32 p. 363 c proves that it was used in the way hinted at by Lucr.: ὁ φιλότεκνος ἀξιέπαινον πάθος ἐστὶ καὶ οὐκ ἔοικε τῷ φιλοχρημάτῳ ἢ τῷ φιλαργύρῳ. ἐκεῖνα μὲν γὰρ τὰ ὀνόματα εἰκότως παρὰ τοῖς ἀνθρώποις ὀνείδη λέγεται καὶ ἔστιν· οὐ γὰρ ποιεῖ αὐτὰ ἡ φύσις, ἀλλ' ἡ μοχθηρία ἡ ἡμετέρα. τοῦτο δὲ ἄνωθεν αὐτῇ ἐνδέδοται ἐκ τοῦ οὐρανοῦ καὶ ἐξῆπται ἐκείνης ἀτεχνῶς τῆς χρυσῆς καὶ ἀρρήκτου σειρᾶς, δι' ἧς ξυρράπτουσα ἀεὶ καὶ ξυγκολλῶσα τῷ φθίνοντι τὸ φυόμενον οὐκ ἀπολισθαίνειν ἐᾷ εἰς τὸ μὴ εἶναι: Heracl. alleg. Hom. ch. 36 gives another stoical explanation of the σειρή. **1159** *fetus* are the *arborei fetus* or *fructus*: he thus enumerates corn, vines, fruits of trees and pastures, the four chief products of the earth: comp. V 783 and 786: thus too Virg. geor. I 54 *Hic segetes, illic veniunt felicius uvae, Arborei fetus alibi atque iniussa virescunt Gramina*; but his *Arborei* leaves no ambiguity: 1163 *fetus* is more general. **1162** *suppeditati* is most simply taken as *mare supped.* in I 230, where see note, and possibly II 568 *unde omnia suppeditantur*: our wants scarcely supplied by the tilled lands: otherwise *arvis* may be the dat. and *supped.* have its more usual force, as VI 1066 *Ut mihi multa parum genere ex hoc suppeditentur*: we are scarcely supplied in sufficient numbers, our numbers scarcely suffice for the tillage of the lands: [comp. Lucan I 29 *desuntque manus poscentibus arvis.*] **1163** shews how this is: they are so

niggardly of their products, and only let these grow after great exertion on our parts: *aug. lab. fetus* = exactly 1160 *vix nostro grandescunt aucta labore.* *labore* occurs by itself in Cic. pro Sex. Roscio 88 *ut quaestum nosset nullum, fructum autem eum solum quem labore peperisset.* [**1164** *caput quassans*: significative of sorrow or anger: Plaut. asin. 400 *quassanti capite incedit*; Aen. VII 292; XII 894; Val. Flacc. I 528 *Adfremit his quassatque caput*; Caecil. 271 *Sic quassante capite tristes incedunt.*] **1165** *manuum labores*: Ovid met. IV 39 *Utile opus manuum*: comp. too I 209 *manibus melioris reddere fetus*; Sall. Cat. 37 7 *iuventus quae in agris manuum mercede inopiam toleraverat*; Cic. pro Marc. 11 joins *opere et manu factum.* **1166** for the arrangement of the words see n. to I 358; and Livy XXIX 26 4 *sed et bellum bello secundum priori ut atrocius Romanis videretur*; and Hor. sat. II 6 80 *Rusticus urbanum murem mus paupere fertur Accepisse cavo, veterem vetus hospes amicum*, where the words are meant to smell of the 'infacetum rus'. **1171** *vietae*, as also in Terence: Hor. epod. 12 7 *vietis.* *vet. viet.*: Ter. eun. 688 *vietus vetus veternosus senex.* **1172** *momen*: the metaphor seems to be from the *momentum* or sway of the balance. *caelumque fatigat*: Lach. compares Phaedrus IV 20 (19) 24 *Caelum fatigas sordido periurio*: this use of *fatigo* is very common in Latin; IV 1239 *divom numen sortisque fatigant.* **1173** *Nec tenet*: III 649 *Nec tenet amissam laevam* cet.; 1070 *morbi quia causam non tenet*; VI 83 *est ratio caeli speciesque tenenda.* **1174** *ire Ad capulum*: Plautus uses *capuli decus* and *capularis* in jest for one near death. Paulus Festi and Nonius make the word *capulum*, and the latter explains it as 'sarcofagum, id est sepulchrum': in this sense Apul. met. IV 18 *ibi capulos carie et vetustate semitectos, quis inhabitabant pulverei et iam cinerosi mortui, passim.. reseramus*: but Stat. Theb. III 361 *dum funera portant, Dum capulo nondum manus excidit*; Varro ap. Nonium p. 157 *Propter cunam capulum positum Nutrix tradit pollinctori*; and Serv. Aen. XI 64 says of *feretrum* 'Latine capulus dicitur'; Placidi gloss. '*capuli*, lecti funerei vel rogi in modum arae structi; est autem *capulus* masculini generis'. *vetusto* seems harsh as an epithet of *spatio*; yet it recurs III 774 *aetatis spatio ne fessa vetusto*, and V 827 *mulier spatio defessa vetusto*; so that it seems a mere periphrasis for *vetustate.*

BOOK III

1—30: he addresses Epicurus as his father and guide, who had dispelled the darkness of error, explained the whole nature of things, revealed the gods and their blest abodes, and destroyed the belief in Acheron. **4** *Ficta* is the older form, the *t* being softened into *s* in *fixus*: Diomedes I p. 377 11 *reperimus enim* fictus *et* fixus; *Scaurus de*

vita sua 'sagittis' inquit 'confictus' cet. *pedum pono* cet.: Ovid met. II 871 *Falsa pedum primis vestigia ponit in undis*; Hor. sat. II 6 101 *ponit uterque In locuplete domo vestigia*; epist. I 19 21 *Libera per vacuum posui vestigia princeps, Non aliena meo pressi pede.* **5** *cupidus* answers to *quod aveo* and = quod cupio: Livy XLII 5 6 *seu praeoccupati...seu mutationis rerum cupidi seu quia non abiecti esse Romanis volebant*; IX 6 4 *incerti de fide sociorum et quod pudor praepediebat*; Ov. ex Ponto II 3 91 *Haec igitur referens et quod mea crimina...posse latere vides.* **7** *Cycnis*: its position is meant to be emphatic. **9** *patria* is said with reference to *pater*: thou, o father, like a father. *tuisque ex*: see n. to I 841. **11** *omnia, Omnia.. aurea, Aurea*: comp. n. to II 955 *vincere, Vincere.* **12** *depascimur.. dicta*: Eur. Med. 821 ἀποφερβόμενοι κλεινοτάταν σοφίαν. **14** *vocif.*: see n. to I 732. **17** *Discedunt* is here used in what seems its primary sense: see Forc. *video*: the walls of the world part asunder and allow me to see into the boundless void. **18** *sedesque quietae*: the μετακόσμια, which Cicero renders *intermundia*: these the ἰσονομία or *aequalis tributio* of Epicurus required to be as many as the *mundi*, that is to say innumerable: that Epic. and Lucr. believed in these *intermundia* is certain; but how they are consistent with their general system, is as difficult to comprehend as the rest of their firm belief in gods: see what is said on this question at II 646—651, and V 146 foll. and 1161 foll. **19** *Quas neque concutiunt* cet.: *Where falls not hail or rain or any snow, Nor ever wind blows loudly.* **20** *neque nix* cet.: VI 845 *Frigore.. quasi concrescit*; Virg. geor. II 376 *Frigora nec tantum cana concreta pruina.* **21** *Cana cadens*: comp. Virg. geor. IV 370 *Saxosusque sonans Hypanis*; Aen. VIII 559 *inexpletus lacrimans*; Ov. met. VI 475 *patriosque lacertis Blanda tenens umeros.* *innubilus* coined by him to render Homer's ἀνέφελος, for these vss. are from Odyss. ζ 42 ὅθι φασὶ θεῶν ἕδος ἀσφαλὲς αἰεὶ Ἔμμεναι. οὔτ' ἀνέμοισι τινάσσεται οὔτε ποτ' ὄμβρῳ Δεύεται οὔτε χιὼν ἐπιπίλναται, ἀλλὰ μάλ' αἴθρη Πέπταται ἀνέφελος, λευκὴ δ' ἐπιδέδρομεν αἴγλη. **24** *delibat*: 1088 *nec delibare valemus*; comp. too VI 70 *Delibata deum per te tibi numina.* **25** *nusquam apparent*, because he has proved them not to exist. *Acher. templa*: see n. to I 120. **26** *Nec tellus*: it is not the earth which hides them, as his philosophy shews what is below as clearly as what is above the earth. **28** *voluptas.. adque horror*: Petron. sat. 83 *Protogenis rudimenta cum ipsius naturae veritate certantia non sine quodam horrore tractavi.* Wak. cites Stat. Theb. I 493 *laetusque per artus Horror iit*; and Pacuvius 224 *horror percipit*: comp. also Plaut. Amph. 1118 *mihi horror membra misero percipit dictis tuis*; and Pacuv. 294 *animi horrescit, gliscit gaudium.* [**29** *Percipit*: see n. to IV 729, and Ussing to Plaut. Amph. 1134.] **30** *manifesta* is in apposition with and explains *patens*: comp. 21 *Cana cadens.*

31—93: I have now to explain the real nature of the soul and to dispel the terrors of hell which poison life: many boast they know all this, but when tried by adversity, they choose to suffer any misery rather than face death and its consequences: nay often men from this fear will commit any crime, in order to get wealth and honour, thinking that want and contempt destroy the security of life; hence civil war, hence hatred of relations; hence men often rush to death from fear of death: this fear in short is the source of all evils: and can be destroyed only by the true knowledge of nature. **31** *cunct. exor. rer.* = rerum primordia: see n. to I 55 and II 333. **34** *Quove*: see n. to I 57. **36** *claranda*: IV 777 *multaque nobis Clarandumst.* **37** *Et metus* cet.: see n. to I 78. **40** *Esse.. relinquit*: Lucr. is fond of this construction: I 515 *solidum constare relinquas*; 703 *quidvis tamen esse relinquat*; VI 654 *mirari multa relinquas.* *vol. liq. pur. rel.*: Epic. in Diog. X 143 ὥστ' οὐκ ἦν ἄνευ φυσιολογίας ἀκεραίους τὰς ἡδονὰς ὑπολαμβάνειν. **42** *Tartara leti*: Virg. geor. IV 481 *intima leti Tartara*: *leti* seems a gen. of quality: see n. to V 369 *cladem pericli*; and comp. Prop. I 1 3 *mihi constantis deiecit lumina fastus.* **43** comp. Emped. 317 Αἷμα γὰρ ἀνθρώποις περικάρδιόν ἐστι νόημα: Arist. de anim. I 2 p. 405 b 6 attributes this theory to Critias, and says there that each of the elements has an advocate to claim for it to be the soul except earth; Tertull. de anima 5 assigns the doctrine to Empedocles and Critias: comp. too Cic. Tusc. I 19 for this and the next v.: there was great play of words on the connexion between *animus*, ἄνεμος, and *ventus*: see Lactant. de opif. dei XVII. [**44** *si fert* cet.: Aen. VI 675 *si fert ita corde voluntas.*] **45** *Nec prosum*: see n. to I 748. *prosum*, as in 514; so *introsum* once and *rusum* three times in A and B; this suppression of *r* after a long vowel before *s* was very common: *susum* three times and *suso vorsum* occur in the sent. Minuc. corp. inscr. I 199. **51** *tamen* though they make these boasts and though they are in such misery, instead of shewing a contempt of death, they have recourse to the meanest superstitions in order to escape it. **52** *nigras* cet.: Virg. geor. IV 545 *Inferias Orphei Lethaea papavera mittes Et nigram mactabis ovem*; Aen. VI 153 *Duc nigras pecudes*; [*'recte factum esto ovibus atris tribus' in carmine devovendae urbis*: Macrob. III 9 11 cited by Wordsworth Frag. and Spec. p. 286.] **57** that Catullus has not unfrequently imitated Lucretius, is I think certain; but so far as I know, these imitations all occur in his longest poem, the marriage of Peleus and Thetis; and most of them in one section of that poem. He seems to have published his works in a collected form only a very short time before his early death which happened, as Schwabe in his recent account of his life has given good reasons for believing, within a year of the death of Lucretius. The poem in question then would appear to have been written or completed just before this publication. The apparent imitations which I have observed in Catullus' 64th poem I will now give. Compare III 57 *Nam*

verae voces tum demum pectore ab imo Eiciuntur, 81 *maerenti pectore*, VI 16 *infestis cogei saevire querellis, quae quoniam* a common Lucretian phrase, with Catullus l. l. 195 *meas audite querellas, Quas ego..proferre..Cogor..Quae quoniam verae nascuntur pectore ab imo*, 125 *imo fudisse e pectore voces*, 202 *Has postquam maesto profudit pectore voces*, 221 *laetanti pectore*: Lucr. III 834 *Omnia cum belli trepido concussa tumultu Horrida contremuere sub altis aetheris oris*, with Cat. 294 *numine..Quo tunc et tellus atque horrida contremuerunt Aequora concussitque micantia sidera mundus; sidera mundi* being a Lucretian expression: Lucr. III 304 *caecae caliginis* with Cat. 207 *caeca caligine*, both speaking of the mind: Lucr. II 581 *Illud in his obsignatum quoque rebus habere Convenit et memori mandatum mente tenere*, with Cat. 209 *Quae mandata prius constanti mente tenebat*, 231 *facito ut memori tibi condita corde Haec vigeant mandata*, 238 *Haec mandata prius constanti mente tenentem*: Lucr. II 618 *Tympana tenta tonant palmis et cymbala circum Concava raucisonoque minantur cornua cantu*, 636 *in numerum pulsarent aeribus aera*, IV 546 *Et reboat raucum regio cita barbara bombum*, with Cat. 261 *Plangebant alii proceris tympana palmis Aut tereti tenuis tinnitus aere ciebant: Multis raucisonos efflabant cornua bombos Barbaraque horribili stridebat tibia cantu*: Lucr. I 718 *magnis anfractibus aequor..Angustoque fretu rapidum mare dividit undis*, with Cat. 178 *gurgite lato..pontum truculentum ubi dividit aequor*: Lucr. I 110 *Nunc ratio nulla est restandi, nulla facultas*, with Cat. 186 *Nulla fugae ratio, nulla spes*: Lucr. I 631 *quae nullis sunt partibus aucta Non possunt ea*, III 626 *Quinque..faciundum est sensibus auctam*, 630 *animas intro duxerunt sensibus auctas*, IV 460 *Et sonitus audire..et reddere dicta tacentes*, with Cat. 165 *quae nullis sensibus auctae Nec missas audire queunt nec reddere voces*: Lucr. I 722 *Hic est vasta Charybdis* with Cat. 156 *quae vasta Charybdis*: Lucr. I 11 *genitabilis aura favoni* with Cat. 282 *Aura...tepidi, fecunda favoni*: Lucr. VI 34 *Volvere curarum tristis in pectore fluctus*, 74 *magnos irarum volvere fluctus*, with Cat. 62 *magnis curarum fluctuat undis*: Lucr. III 615 *animi mens consiliumque*, etc. with Cat. 136 *mentis Consilium*. All the passages I have cited from Catullus come in the episode of Theseus and Ariadne, beautiful in itself but singularly interrupting the theme of the poem; while the passages from Lucretius are scattered through his poem. One might surmise that this episode was filled up by the poet, when he was fresh from reading the new work of Lucretius.—I am by no means inclined to retract the above in consequence of the long polemic with which I have been honoured by Mr Julius Jessen in a recent pamphlet on this subject, p. 5—15: he will see, if he attends to my general argument, that I nowhere imply, or mean to imply, that Catullus has no reminiscences of Lucr. in other parts of his 64th poem: my words assert the very contrary; I only maintain that they are peculiarly frequent in the episode

in question. Mr Jessen's notions too of imitation in poetry are very different from mine, if he hold that it is seen less in resemblances of expression or rhythm, than in the general drift of entire passages. Again I have never seen any reason for supposing that Catullus died before the latter part of U. C. 700: Buecheler's argument is least of all convincing, as I have argued in another place, Journ. of phil. vol. 2 p. 4.

62 *Noctes*——*opes* = II 12 13. **64** *Non min. partem*: VI 1259 *Nec minimam partem*; 1249 *Inde bonam partem*: the same constr. is found in Cicero Caesar and Livy; and in fact *partim* is an accus. **65—67** and so by their wealth they think to put off death or at all events the thoughts of death. 65 *ferme*: see n. to I 14 *ferae* (*fere*). **67** *cunctarier* the infin. as a subst.: see n. to I 331. **68** *Unde...effugisse longeque remosse*: *ea* must be supplied to *remosse* out of *unde*: so 22 *Integit* and what precedes have the accus., while to *rident* a nomin. is understood: comp. too 1018. **69** Draeger hist. synt. § 128 shews that perf. infinitives are very common in legal and old Latin after verbs like *volo*: he says no instance of this constr. is found in Cicero Caesar Sallust and Tacitus. **71** *caedem caede accum.*: VI 1238 *cumulabat funere funus*; Cic. de off. I 116 *Africanus eloquentia cumulavit bellicam gloriam*; in Catil. I 14 *nonne etiam alio incredibili scelere hoc scelus cumulasti*; [Petron. 89 (v. 48) *Accumulat ecce liberum funus parens.*] **72** compared by Macrob. sat. VI 2 15 with Virg. geor. II 510 *gaudent perfusi sanguine fratrum*. **73** *consanguineum*: see n. to I 162. **76** *claro honore*, with the purple and other insignia of high office. **78** *Intereunt* cet.: Enn. ann. 403 *reges per regnum statuasque sepulchraque quaerunt, Aedificant nomen*; Epic. in Diog. Laert. X 149 quoted by Lach. speaks of desires neither natural nor necessary, ὡς στεφάνους καὶ ἀνδριάντων ἀναθέσεις. **80** *Percipit* cet.: Plaut. truc. II 5 14 *eius cito odium percipit*; Ter. eun. 972 *Neque agri neque urbis odium me umquam percipit*. *humanos* = homines; as 837 *Omnibus humanis*: Varro in Nonius p. 81 *Natura humanis omnia sunt paria*; Iustin. XLII 3 *primusque humanorum*; Cic. ad Att. XIII 21 5 *possum falli, ut humanus* (mss. *homo* editions); Ov. fasti II 503 *Pulcher et humano maior*. **81** Epicurus appears to have dwelt on this topic: comp. Sen. epist. 24 22 *item alio loco dicit* (Epicurus) '*quid tam ridiculum quam adpetere mortem, cum vitam inquietam tibi feceris metu mortis?*' *his adicias et illud eiusdem notae licet* '*tantam hominum imprudentiam, immo dementiam, ut quidam timore mortis cogantur ad mortem*'; 70 8 *stultitia est timore mortis mori*. **83 84** for the hiatus here, which seems the simplest remedy, comp. notes 1: Conington on Aen. X 9 *quis metus aut hos Aut hos arma sequi ferrumque lacessere suasit*, and Nettleship suggest that Virgil here had Lucr. in mind. If this be so, we can hardly expel *suadet*, or give another meaning to the *Hunc—hunc* of 83. [Comp. Cic. epist. IX 16 4 *ut Servius..facile diceret* '*hic versus Plauti non est, hic est*'. **84** *in summa*:

auct. bell. Alex. 71 *agere—postulare—interponere, in summa frustrari coepit.* See too Mayor on Juv. III 79 and index s. v.] 87—93 = II 55—61, where see notes; and VI 35—41.

94—135: well first the mind, *animus* or *mens*, is a part of man, as much as the foot or head: some deny this and affirm the mind's sense to be a harmony or certain life-giving state of the body by which we have sense, though the mind is nowhere: they are quite wrong; for often the body is sick, while the mind is happy; the mind is wretched, when the body is well; just as the foot may be sore, when the head is whole: again the body is often asleep and without sense, while something in us is moved by various passions. Next the soul too or *anima* is in the body and no mere harmony; for often much of the body is taken away, while life continues; and often when a few particles only of heat and air quit it, life is gone; so that you see that some elements are more important for life than others: this harmony therefore is nothing. **94** *Primum*: he first shews that the *animus* is a part of the body, being in fact in the region of the heart: see 140 foll.: then 117 foll. he proves the *anima* also to be a part, being in fact spread over the whole body: see 143 foll. *animum.. mentem quam*: 99 *habitum quendam.. Harmoniam Grai quam dicunt*; 139 *Consilium quod nos animum mentemque vocamus*; 555 *homine, illius quasi quod vas esse videtur*; IV 132 *in hoc caelo qui dicitur aer.* [So Caes. bell. Gall. I 38 1 *ad occupandum Vesontionem, quod est oppidum maximum Sequanorum*; but V 11 8 *flumen quod appellatur Tamesis.*] See Lach. and comp. Cic. de leg. I 22 *animal hoc...quem vocamus hominem*; de rep. VI 21 (somn. Scip. VI 3) *illo mari, quod Atlanticum, quod magnum, quem oceanum appellatis in terris, qui tamen* cet. According to Madvig's rule, Lat. gram. 316, Cicero in our passage would have written *mentem quem* with AB; as we perhaps ought to do: 99 and IV 132 he would have agreed with Lucr., but not III 555: Lach. is to me obscure and ambiguous here; and he takes no account of I 432 *Quod quasi tertia sit numero natura reperta*, which seems to contradict his law, but agrees with Madvig's. *animum, mentem*: see n. to I 74 *mente animoque*: the words are, as Lucr. here intimates, perfect synonymes all through this book: 139 *Consilium quod nos animum mentemque vocamus* gives us a third synon. **97** *oculei*: I 230 *ingenuei*; IV 602 *vitrei*: in these places our mss. have preserved this old spelling, which doubtless Lucr. himself employed much oftener; and which appears more or less disguised in the mss. in I 1114 and V 38 *sei*, V 201 *avidei*, VI 16 *cogei*, 1195 *trucei*, 1199 *ibei*: the same diphthong is found in the middle of the word in VI 1217 *exeiret*, 1221 *Exeibant*. **100** *Grai* are the Greeks who maintain this theory. *quod faciat* refers to the *habitum vitalem* or life-giving or life-supporting ἕξις. The chief of these *Grai* was Aristoxenus a pupil of Aristotle and a famous writer on music: Cic. Tusc. I 19 says *Aristoxenus musicus idemque philosophus ipsius corporis intentionem quandam, velut in cantu et fidibus quae harmonia dicitur; sic ex corporis totius natura et figura varios motus cieri tamquam in cantu sonos. hic ab artificio suo non recessit et tamen dixit aliquid, quod ipsum quale esset erat multo ante et dictum et explanatum a Platone*: he refers apparently to Phaedo 80 foll. p. 86 foll. where the Theban Simmias asserts that the soul is ἁρμονία τις and is afterwards so triumphantly refuted by Socrates: comp. too Lactant. inst. VII 13 *quid Aristoxenus qui negavit omnino ullum esse animum, etiam cum vivit in corpore? sed sicut in fidibus ex intentione nervorum effici concordem sonum atque cantum quem musici harmoniam vocant, ita in corporibus ex compage viscerum ac vigore membrorum vim sentiendi existere*: this would connect him with his fellow-pupil Dicaearchus, a favourite of Cicero, who says of him Tusc. I 21 that he held *nihil esse omnino animum et hoc esse nomen totum inane...vimque omnem eam qua vel agamus quid vel sentiamus, in omnibus corporibus vivis aequabiliter esse fusam nec separabilem a corpore esse, quippe quae nulla sit nec sit quicquam nisi corpus unum et simplex, ita figuratum ut temperatione naturae vigeat et sentiat*; and 51 he joins the two. **106** *Saepe itaque*: to prove what I say, often then et cet. *aegret* recurs 824, *morbis cum corporis aegret*, and is hardly found elsewhere. **113** comp. Cic. Verr. V 28 *ut fusi sine mente ac sine ullo sensu iacerent.* *honustum* is too well attested for us to regard it as a corruption: Gell. II 3 3 'sic *honera*, sic *honustum* dixerunt (veteres nostri)'; and Servius to Aen. I 289: the Plautus palimpsest attests it more than once; and Mueller I see in Lucil. XIX 5 reads *honustam* for *honestam* of mss. **116** *inanis*, the vain fancies of a dream. Both the above reasons prove the *animus* to be a distinct part, not a mere state of the whole body, as Aristoxenus says.

117 *animam*: this as shewn in the next paragraph is spread over the whole body: he proceeds to prove that it, as well as the *animus*, is no harmony, because often a large portion of the body, say the arms and legs, might be taken off, and life remain, while often the smallest puncture in a more vital part will cause death.—*in membris*, 'in numero membrorum' Lamb. I take it simply for 'in corpore', as 120 *in membris vita moretur*, and elsewhere: by making it a mere harmony, they made it a nonentity. **125** *corpora, prima* of course = 127 *Semina.* **129** *moribundos des. artus*: 653 *moribundus pes*; 1033 *moribundo corpore*; Ov. her. 14 13 *ut dicant morientia 'paenitet' ora*: for rhythm Ov. ibis 125 *cruciatos spiritus artus Deserat.* **132** *ad organicos*, to musicians like Aristoxenus. *delatum Heliconi* cet. whether this name came from the muses, or whether they got it themselves from some other source and applied the general term ἁρμονία or fittingness to musical tune. *Heliconi* is abl.: see n. to I 978. **133** *in illam.. quae res*: see n. to I 15 *capta.. quamque.* **135** *habeant* = sibi habeant: the phrase, as here, generally indicates contempt; and is common enough: Cic. pro Sulla 26

sibi haberent honores, sibi imperia, sibi provincias, sibi triumphos, sibi alia praeclarae laudis insignia: *mihi* cet.; pro Flacco 104 *sibi habeant potentiam, sibi honores, sibi ceterorum commodorum summas facultates*: *liceat his* cet.; Cato 58 *habeant igitur sibi arma, sibi equos, sibi hastas, sibi clavam et pilam, sibi natationes atque cursus*: *nobis* cet.: *tibi habe* in Juv. III 187; v 118, where see Mayor; Mart. VII 48 4 has *vobis habete*. There is a contemptuous irony in these last vss. not unlike what Cicero Tusc. I 41 uses: *alter* (Aristoxenus) *ita delectatur suis cantibus ut eos etiam ad haec transferre conetur. harmoniam autem ex intervallis sonorum nosse possumus...membrorum vero situs et figura corporis vacans animo quam possit harmoniam efficere non video. sed hic quidem, quamvis eruditus sit, sicut est, haec magistro concedat Aristoteli, canere ipse doceat*: Cicero means to say his master would have taught him better on this head, though he were a better teacher of singing himself: comp. Arist. de anima I 4 at beg. καὶ ἄλλη δέ τις δόξα παραδέδοται περὶ ψυχῆς ...ὥσπερ εὐθύνας δεδωκυῖα καὶ τοῖς ἐν κοινῷ γιγνομένοις λόγοις, i.e., as Bernays die Dialoge des Arist. p. 14 foll. says, in his celebrated dialogue Eudemus where this theory was discussed and refuted: in p. 27 is quoted from Philoponus a very interesting fragment of this dialogue bearing on the argument mentioned by Lucr. 102 *Ut bona saepe valetudo* cet.: it concludes εἰ τοίνυν ἡ ἀναρμοστία (τοῦ σώματος) νόσος καὶ ἀσθένεια καὶ αἶσχος, ἡ ἁρμονία ἄρα ὑγίεια καὶ ἰσχὺς καὶ κάλλος. ψυχὴ δὲ οὐδέν ἐστι τούτων, οὔτε ὑγίεια, φημί, οὔτε ἰσχὺς οὔτε κάλλος. ψυχὴν γὰρ εἶχεν καὶ ὁ Θερσίτης αἴσχιστος ὤν· οὐκ ἄρα ἐστὶν ἡ ψυχὴ ἁρμονία. The peripatetics at this time began to make a great stir, and Lucr. appears more hostile to them than to any except the stoics: their philosophy was in most points very adverse to his. On the above question comp. 'Alex. Aphrod. de anima, p. 127 b Ald. 1534' J. E. M.

136—160: the *animus* and the *anima* make up one nature, but the *animus* is the ruling part in the whole body and is situated in the region of the heart; the *anima* being spread through the body: sometimes the *animus* feels, when the *anima* does not; but under any violent emotion we see the *anima* sympathise throughout the frame with the *animus*: the *anima* therefore is united with the *animus*, and being moved by it, stirs the whole body. **136** *coniuncta*: the neut. as usual when referred to two subst. of different genders: but 416 *Hoc anima atque animus vincti sunt foedere semper*; IV 1009 *Accipitres . . persectantes visaeque volantes*: 66 I have obeyed Lamb. and Lach. in reading *Semota . . videntur* for *videtur*: the change is slight; but perhaps it is wrong to refuse to Lucr. the same liberty which other writers claim: Cic. pro Cluent. 146 can say *mens et animus et consilium et sententia civitatis posita est in legibus*. **140** *Idque situm* cet.: Epic. in Diog. Laert. X 66: τὸ μέν τι ἄλογον, i.e. the *anima*, αὐτῆς (τῆς ψυχῆς) ἐν τῷ λοιπῷ παρεσπάρθαι σώματι, τὸ δὲ λογικὸν ἐν τῷ θώρακι, ὡς δῆλον ἔκ τε τῶν φόβων καὶ τῆς χαρᾶς.

Arist. de part. an. II 10 p. 656 28 says that the ἀρχὴ τῶν αἰσθήσεών ἐστιν ὁ περὶ τὴν καρδίαν τόπος: so with Epicurus the *animus* was not the heart, but in or about the heart: Cic. Tusc. I 19 *aliis nec cor ipsum placet nec cerebri quandam partem esse animum, sed alii in corde, alii in cerebro dixerunt animi esse sedem et locum*: the heart had more advocates than the brain. *regione in pectoris*: Lucr. is fond of this position of the prep.: 49 *Conspectu ex hominum*; 463 *morbis in corporis*; 824 *morbis cum corporis*; 1088 *Tempore de mortis*; IV 335 *oculis in eorum*; VI 466 *ipso Vertice de montis*; 1074 *uno Corpore cum lanae*; 1265 *silanos ad aquarum*; IV 547 *validis cycni torrentibus ex Heliconis*: this idiom occurs in Virgil and in other poets, and is one of the numerous artifices of Tacitus to deciceronise the style of his annals; as III 72 *ornatum ad urbis*. **141** *Hic* cet.; comp. Epic. l. l. **142** *Laetitiae*: Cicero twice quotes from Caecilius *omnibus laetitiis*; and, ad Att. I 17 6, has himself *laetitias tuas*: Pompon. 141 *laetitias*; so V 48 *desidiaeque*. *hic ergo* is the τὸ λογικόν of Epicurus, the *consilium*, *mens* or *animus* of Lucr. **143** *per totum dissita corpus*, a translation of Epic. l. l. παρ' ὅλον τὸ ἄθροισμα παρεσπαρμένον. **144** *numen* here perhaps unites the physical sense which it has II 632 and IV 179, and the metaphorical sense of will, much as Catull. 64 204 *Adnuit invicto caelestum numine rector Quo* cet. *momen*, again the ῥοπή or sway of the balance. **145** *Idque*, the *consilium* of 139 and 140: Accius 296 *Sapimus animo, fruimur anima: sine animo anima est debilis*. **147** *Et quasi* cet.: the eye and the head may be affected without the rest of the body feeling with them, but when these are more violently assailed by disease, the rest of the body sympathises, shewing thus that it is one with them: so it is with the *animus* and *anima*. **155** *infringi linguam*: the καμ μὲν γλῶσσα ἔαγε of Sappho; for doubtless Lucr. was here thinking of her famous ode. *aboriri*: V 733 he has the unexampled form *aborisci*. **156** *sonere* recurs 873: *sonit sonunt resonit resonunt*, as well as *sonere*, occur in Ennius or other old writers. **160** *exim* is the spelling of our mss. and of the best authorities. *icit*: IV 1050 *unde icimur ictu*: the technical phrase *foedus icere* is common in the best writers: see too Ov. fasti IV 709.

161—176: the *animus* and *anima* are therefore bodily also, since they can move and direct the body; for this cannot be without touch nor touch without body: the *animus* too suffers with the body, when the latter is wounded: it must then be bodily, since it suffers from bodily weapons. **162** *Corpoream*: Epic. l. l. 63 says ὅτι ἡ ψυχὴ σῶμά ἐστι λεπτομερές κ.τ.λ. **163** comp. Aen. IV 572 *Corripit e somno corpus*. **168** *fungi*: see n. to I 440. **170** *Si*: see n. to II 80. **171** *intus* appears to belong to *disclusis*, and *adactus* is used, as Aen. IX 431 *sed viribus ensis adactus Transabiit costas*: those who would join *intus* with *adacta* might appeal to VI 23 where *intus* would go most naturally

with *receperat*: I 223 II 711 and IV 1091 *intus*, properly explained, has its proper force. **173** *Segnis*: with this might be compared Aen. X 699 *poplite Palmum Succiso volvi segnem sinit.* *in terra* is opposed to *terrae petitus*: when one is down on the ground. **176** comp. with what precedes Epic. l. l. 67 *καθ' ἑαυτὸν δὲ οὐκ ἔστι νοῆσαι τὸ ἀσώματον πλὴν ἐπὶ τοῦ κενοῦ· τὸ δὲ κενὸν οὔτε ποιῆσαι οὔτε παθεῖν δύναται, ἀλλὰ κίνησιν μόνον δι' ἑαυτοῦ τοῖς σώμασι παρέχεται· ὥσθ' οἱ λέγοντες ἀσώματον εἶναι τὴν ψυχὴν ματαΐζουσιν· οὐθὲν γὰρ ἂν ἐδύνατο ποιεῖν οὔτε πάσχειν, εἰ ἦν τοιαύτη· νῦν δ' ἐναργῶς ἀμφότερα ταῦτα διαλαμβάνομεν περὶ τὴν ψυχὴν τὰ συμπτώματα.*

177—230: the *animus* consists of very small round atoms, which can move with extreme celerity and ease; for nothing is so swift as thought: of visible things those which move most easily, as water, are composed of very small round elements: those of the *animus* then must be eminently subtle. Again the fineness and smallness of the substance of the *animus* and *anima* are shewn by this: after death, when they have left the body, it is not perceptibly diminished in size or weight; you may compare it with wine whose flavour is gone, or the like: the elements which compose this flavour are very minute; and their absence does not lessen the weight and bulk of the wine. **177** *animus*: it will be seen, by comparing 208 *eius* with 212 *animi natura animaeque* and the rest of the section, that here too he includes the *anima* in the term *animus*; though it is not till 421 that he tells us that when he uses one word he intends to comprise the other as well, where the one is not expressly distinguished from the other. It is his general practice, as we have often seen, to keep distinct similar words, when his argument requires it; to use them indifferently, when precision is not called for. *corpore* is here used in its most general sense for material substance. **178** *Constiterit* = constet: see n. to I 420. **184** *res ulla .. quorum*: Sall. Iug. 41 1 *abundantia earum rerum, quae prima mortales ducunt*; Cic. ad fam. XVI 4 2 *ulla in re, quod ad valetudinem opus sit*; Livy XXXII 29 5 *rebusque aliis divinis humanisque, quae per ipsos agenda erant, perfectis*: see n. to II 897 *Quarum nil rerum*; and to I 57. **186** *constare rutundis* cet.: Diog. Laert. X 66 *ἀλλὰ μὴν καὶ τόδε λέγει ἐν ἄλλοις, καὶ ἐξ ἀτόμων αὐτὴν συγκεῖσθαι λειοτάτων καὶ στρογγυλωτάτων, πολλῷ τινι διαφερουσῶν τῶν τοῦ πυρός.* **189** *flutat*: IV 77 *flutant* from a probable conj. of Turnebus. Macrob. sat. III 15 8 quotes from Varro's Gallus de admirandis '*in Sicilia quoque*' *inquit* '*manu capi murenas flutas, quod eae in summa aqua prae pinguedine flutentur*'. **190** and **246** *figuris*: see n. to II 385. **192** *actus*: Aen. XII 687 *Fertur in abruptum magno mons improbus actu*: Paulus Fest. p. 17 explains it as *modo motum corporis, ut histrionum et saltatorum.* **196—202** after his wont he gives an example of what we see before our eyes in order to illustrate his argument: a heap of poppy-seeds which are small and round a breath disperses, a heap of stones a violent wind cannot stir. **196** *papaveris* is put out of its place at beg. of the sentence to render more vivid its contrast with 198 *lapidum*: see n. to 843 and II 250. *suspensa*: V 1069 *Suspensis .. dentibus.* **197** *tibi*: see n. to I 797. **199** *Noenu* recurs IV 712: it is simply *ne oenum* (*ne unum*), the fuller form of *non*; *ne nec neque* being the old negative particles: see n. to II 23. [Comp. Lucil. XXX 23 *si noenu molestumst*: see Mueller's note p. 267.] *proquam*: see n. to II 1137. **201** *cum pondere magno* = pondere magno, the abl. of quality: see n. to I 755. **207** *cluebit* = erit, as so often. **208** *quoque etiam*, and *quoque item*, *etiam quoque*, *item quoque* occur in Lucr. again and again: *quoque etiam* is not unknown to Cicero: de orat. I 164 *nunc vero, Crasse, mea quoque etiam causa rogo*; in Verr. III 206 *cetera, quae forsitan alii quoque etiam fecerint*: nor *etiam quoque* to Livy: in Plautus *quoque etiam* is very common: asin. 184 *et quoque etiam.* **208** *Haec quoque res,* **211** *Quod*: *quod* has here the same force as if the sentence had been introduced without any connecting particle: comp. Cic. de off. II 70 *videndumque illud est, quod, si opulentum fortunatumque defenderis, in uno illo .. manet gratia; sin autem* cet.: see n. to VI 250. **211** *sec. quies*: 939 *capis securam, stulte, quietem.* **212** *Indepta*: see n. to I 82. **213** *cernas*: see n. to I 327. **214** *Ad speciem, ad pondus*: V 569 *nil ad speciem est contractior ignis*; Cic. in Verr. (2) I 58 *vidi .. forum comitiumque adornatum ad speciem magnifico ornatu, ad sensum cogitationemque acerbo et lugubri*; Livy III 38 1 *neque ad speciem* (imminutis) *honoris insignibus*; Mela II 16 *viros benignius alit, non ad speciem tamen,...ceterum ad ferociam et numerum.* **215** *cal. vap.*: see n. to II 844. **219** *Extima membrorum circumcaesura* recurs IV 647: *περικοπή* sometimes has the same sense. [Comp. Arnob. III 13 *terrenorum corporum circumcaesura finitis.*] **221** *Quod genus est*: see n. to II 194. *Bacchi flos*: *Liberi* or *vini flos* is found in Livius Andr. Pacuvius and more than once in Plautus: curcul. 96 *Flos veteris vini naribus meis obiectust* shews that *flos* means the bouquet of the wine: comp. II 848 *nardi florem*: Pliny XIV 136 has *flos vini* for the *spuma*: see Turnebi adv. XXIX 34. **227** *rerum*: the *sucos et odorem* shew that he is speaking of the different things above mentioned, the wine, the perfume and the *aliquod corpus.*

231—257: the *animus* is made up of spirit heat air and a fourth nameless substance, the finest and most nimble that can be conceived and made of the smallest and finest atoms: from it comes the beginning of sensation which thence spreads through the several parts of the body: the least pain or hurt, if it reach to this substance, will destroy life at once. **232** foll. Epic. l. l. 63 says of the *ψυχή* that it is a thing *προσεμφερέστατον πνεύματι θερμοῦ τινὰ κρᾶσιν ἔχοντι καὶ πῇ μὲν τούτῳ προσεμφερὲς πῇ δὲ τούτῳ (ἐκείνῳ)*: Lucr. expresses his *πνεῦμα* by *aura*, his *θερμοῦ κρᾶσιν ἔχον* by *mixta vapore*: *vapor* and 234 *calor* are of course

synonymes as elsewhere in Lucr.: in this slight sketch Epicurus speaking of the whole ψυχή does not mention the air, nor the fourth nameless substance; but Stob. ecl. I 41 1 and Plut. de plac. phil. IV 3 say that Epic. made the soul κρᾶμα ἐκ τεττάρων, ἐκ ποιοῦ πυρώδους, ἐκ ποιοῦ ἀερώδους, ἐκ ποιοῦ πνευματικοῦ, ἐκ τετάρτου τινὸς ἀκατονομάστου ὃ ἦν αὐτῷ αἰσθητικόν. **234** *Nec calor* cet.: Lucr. seems to have drawn this conclusion from what he saw of fire and its mode of operation. *calor quisquam*: see n. to I 1077 *Nec quisquam locus est*. *cui*: Enn. Epich. 2 *Frigori miscet calorem atque umori aritudinem*; Aen. VIII 431 *Miscebant operi*; Ov. met. II 634 *mixtoque oneri gaudebat honore*; IV 140 *fletumque cruori Miscuit*; V 638 *se mihi misceat*; XIII 866 *se tibi misceat*; Lucan I 271 *plebi miscere*. **239** 'may not *mens* be right? since the mind does not allow' J. E. M. **240** *Sensiferos*: a word peculiar to Lucr. and to this book. **242** *east omnino nominis expers* and 279 *nominis haec expers vis* express the ἀκατονόμαστον of Plutarch and Stobaeus: the latter continues l. l. τὸ δ' ἀκατονόμαστον τὴν ἐν ἡμῖν ἐμποιεῖν αἴσθησιν· ἐν οὐδενὶ γὰρ τῶν ὀνομαζομένων στοιχείων εἶναι αἴσθησιν, and Plut. adv. Col. 20 says τὸ γὰρ ᾧ κρίνει καὶ μνημονεύει καὶ φιλεῖ καὶ μισεῖ καὶ ὅλως τὸ φρόνιμον καὶ λογιστικὸν ἔκ τινος φησὶν ἀκατονομάστου ποιότητος ἐπιγίνεσθαι: this fourth nameless thing must have been restricted to the central *animus*; the *anima* must have shared with it the other three: perhaps Epicurus got the notion of this τετάρτη οὐσία or quartessence from the quintessence of Aristotle. **247** *venti* here and below takes the place of the *aura* of 232 and 290: its effects are described below; but how far this *ventus*, *aura* or πνεῦμα differed in substance from his *aer* is not stated. **250** *postremis...ossibus*: see n. to II 217 and 1080, and comp. Aen. V 857 *Vix primos inopina quies laxaverat artus*; Aen. XI 664 *Quem telo primum, quem postremum...Deicis*; Cic. ad Att. XIII 45 1 *in qua extrema scriptum erat*; XIV 8 1 *litteras.. quibus in extremis erat*. **251** *ardor*, a strong excitement or feeling, good or bad; the epithet *contrarius* makes it here the opposite of *voluptas*. **252** *huc*, to the central position of this fourth nameless thing. **257** *Motibus* i.e. of physical pain or suffering. **252—257** it must surely have been a misapprehension of some statement of Epicurus similar to this that led to the strange assertion in Plut. de plac. phil. IV 23 that Epicurus placed καὶ τὰ πάθη καὶ τὰς αἰσθήσεις ἐν τοῖς πεπονθόσι τόποις· τὸ γὰρ ἡγεμονικὸν ἀπαθές.

258—332: these four substances have their elements so mixed together as to make up a single whole; just as in the flesh of any animal there are different substances, which yet compose a single body: the fourth nameless substance, the first source of sensation, lurks in the inmost recesses of the body and is so to speak the soul's soul, being to the soul what the soul is to the body, and supreme over both. Thus too the three other substances must be so mixed up as to form one whole, lest their several powers acting independently should destroy sensation: every animal has in it the heat, the spirit, and the air, but one animal has more of one than of the other, and thus gets its distinctive character: the lion has more of heat, the stag of spirit or wind, the ox of air: so is it with men; their characters differ as they have more of one or of another of these: yet reason will so keep down the too great influence of any of them, that a wise man may live like a god. **258** see n. to II 1059 for rhythm. **259** *Compta*: see n. to I 950. **260** *patr. ser. eg.*: see above p. 11. **261** the constr. seems to be *summatim tangam, ut potero attingere*: such involutions are common in Lucr.: see n. to 843. **262** *principiorum* is, as always, the gen. plur. of *primordia*; therefore *princ. motibus* = suis motibus. **265** *multae vis*: see n. to II 586.

266 and **276** *Quod genus*: see n. to II 194: in both our places the illustration it introduces refers alike to what precedes and follows: comp. 327. **266 267** comp. II 680 *multa vides quibus et color et sapor una Reddita sunt cum odore* cet. and note there. **271** *ab se*: IV 468 *animus quas ab se protinus addit*, though the force of *ab se* is there slightly different. **271 272** are illustrated in the preceding paragraph. **273 274 275** and **279 280 281** notice the redundancy of words and their repetition, by which he wishes to point attention at once to the exceeding fineness and secrecy and the exceeding importance of this nameless substance. **274** *infra* = IV 112 *infra nostros sensus*: comp. too II 138 *a principiis ascendit motus et exit Paulatim nostros ad sensus*; and n. there: so that I take *infra est* to be almost a synon. of *subest*. **275** and **281** *Proporro*: see n. to V 312. 'Is not this v. strange when compared with 280? would he need the apologetic *quasi* of 280, if he had without qualification said the same thing just before?' J. E. M. **279** *tibi*: see n. to I 797. **282** *Consimili ratione*: in the same way that this fourth substance mixes with the others, yet keeps itself withdrawn and is known only by its effects; so the other three must keep themselves each one in due subordination or prominence according to the nature in which they are, lest by acting independently they should ruin one another and destroy sense. **284** i.e. aliud aliis magis subsit in hac re, magis emineat in illa re. **285** the most prominent of the three in any nature giving that nature its unity and distinguishing character; the lion having for instance more of the *calor*, the stag more of the *ventus*, and so on. But 294 foll. must be taken into consideration together with 288 foll.: we all have each of these elements, as may be seen in anger, etc.; but one generally predominates in one, another in another animal. **286** *Ni*: see n. to II 734 *Nive*. *seorsum* and *diducta* mean, if they were separate and therefore hostile. **288** *Est etenim* cet. for every mind and soul have in them all three; but 294 foll. in one animal one is more prominent, in another another; and 307 so it is with men: one man partakes more of one, another of another. *in ira Cum fervescit*: 295 *facile effervescit in ira*.

289 *ex oculis* cet.: Aen. XII 102 *oculis micat acribus ignis.* **292** *etiam quoque*: see n. to 208. **293** *fit qui*: see n. to II 547, and IV 752 *docui quoniam*; and comp. Ov. fasti I 91 *cur de caelestibus unus, Sitque quod a tergo sitque quod ante, vides?*; trist. IV 1 100 *Et tulerit me quo casus et unde, subit.* **296** *vis violenta leonum*: 8 *fortis equi vis*; IV 681 *promissa canum vis*: Lucr. delights in this and like periphrases, *animi vis animaeque potestas*; *ferri, aeris vis, plumbi potestas, tripectora tergemini vis Geryonai, rapax vis solis equorum*, etc. **297 298** *Pectora qui frem. rumpunt* cet.: Aen. VII 15 *gemitus iraeque leonum*: Heyne to Aen. XII 526 *nunc, nunc Fluctuat ira intus; rumpuntur nescia vinci Pectora*, says that the image there is taken from water boiling up, which strives to burst the vessel in which it is confined: thus in our passage the breast cannot hold the boiling billows of rage, but is ready to break: with 298 comp. also VI 34 and 74; Catull. 64 62 *magnis curarum fluctuat undis*; Aen. IV 532 *magnoque irarum fluctuat aestu*, and XII 831 *Irarum tantos volvis sub pectore fluctus*; Livy XXXV 18 6 *ingentes iam diu iras eum in pectore volvere.* **298** Ov. met. VI 609 *ardet, et iram Non capit ipsa suam Progne*; Aen. VII 466 *Nec iam se capit ipsa*: [see too Mayor on Juv. x 148.] **303** *percit*: I 212 *cimus*: where see note. **305** *perfixa*: see II 360. **306** *Inter utrosque* cet. imitated perhaps by Manil. II 240 *Inter utrumque manet Capricornus corpore mixto.* [**313** *clem. aequo*: 'Sall. Cat. 50 *gravius aequo.* Sonst nur Lucr. u. Horaz' Draeger hist. synt. I p. 524.] **315** *sequacis* seems rightly explained by Creech and Forc. 'qui istam naturam sequuntur'. **316** seems modelled on Cic. Arat. 234 *Quarum ego nunc nequeo tortos evolvere cursus.* **319** *firmare* for *affirmare* is rarely found in good writers, for *confirmare* frequently in the best and elsewhere in Lucr.: but the former is one of Tacitus' many artifices of style: ann. I 81 *firmare ausim*; VI 6 *firmare solitus est.* **322** *Ut nil inpediat*: Epic. in Diog. Laert. x 135 ταῦτ᾽ οὖν καὶ τὰ τούτοις συγγενῆ μελέτα διὰ παντός...καὶ οὐδέποτ᾽ οὔθ᾽ ὕπαρ οὔτ᾽ ὄναρ διαταραχθήσῃ, ζήσῃ δ᾽ ὡς θεὸς ἐν ἀνθρώποις· οὐθὲν γὰρ ἔοικε θνητῷ ζώῳ ζῶν ἄνθρωπος ἐν ἀθανάτοις ἀγαθοῖς. **307—322** have pointed reference to the great stoical doctrine of the perfect apathy of the wise or good man: Lucr. concedes much to philosophy and reason; but will not allow that they efface all distinctions of natural character; comp. 319—322 with what Cicero says of Zeno that he 'omnes virtutes in ratione ponebat'; with him and his school in fact 'ipsa virtus brevissime recta ratio dici potest'.

323—349: the soul is held together by the body and in turn keeps the body in life; the one cannot be torn from the other without destruction to both, any more than its perfume can be separated from frankincense: by their mutual motions sense is kindled; nor is the body ever born nor does it grow without the soul nor continue when the soul has left it; even in the mother's womb they learn in common the motions of life. **327** *Quod genus*, as 266 and 276, introduces an example illustrating both what precedes and what follows. **330** *Haut facile est* means of course that it is quite impossible; as 361 *Difficilest*: see n. there. **332** *consorti vita*: they are coheirs or copartners of a life, which is a *sors*, a patrimony or capital, which cannot be divided, but must be used by them in common: comp. ciris 14 *Si me iam summa sapientia pangeret arce, Quattuor antiquis quae haeredibus est data consors*, where the *arx* is the joint *sors* of the four. **333** *Nec sibi quaeque*: *suus* or *sui* with which *quisque* goes so naturally, allows of *quaeque* being said of either of two: so Cic. pro Rosc. com. 32; Livy II 7 1; x 12 3; XXVIII 20 10 *cum sibi quisque consultum sine alterius respectu vellet*; see Mayor on Juv. I 41: and so *quis* is sometimes used for *uter*; yet the negative *Nec quaeque* for *nec utra* or *nec altera* seems harsh. Terence, on the other hand, heaut. 394 *utrique ab utrisque*; Phorm. 800 *uterque utrique* = alter alteri; [Varro Men. 377 B *uterque utrumque vituperato*; Mart. VII 38 4 *alterius fiet uterque timor.*] **336** *accensus... sensus*: comp. II 943 and 959. This doctrine of Lucr. that for the production of sense and life the body is as necessary to the soul as the soul is to the body; that though sensation must begin with the *animus* and proceed to the *anima* before it can extend to the body, and the sense of the soul is more active than that of the body, yet the body feels and lives as well as the soul, is emphatically declared by Epic. in Diog. Laert. x 63 καὶ μὴν καὶ ὅτι ἔχει ἡ ψυχὴ τῆς αἰσθήσεως τὴν πλείστην αἰτίαν δεῖ κατέχειν. οὐ μὴν εἰλήφει ἂν ταύτην, εἰ μὴ ὑπὸ τοῦ λοιποῦ ἀθροίσματος ἐστεγάζετό πως· τὸ δὲ λοιπὸν ἄθροισμα παρασκευάσαν τὴν αἰτίαν ταύτην μετείληφε καὶ αὐτὸ τοιούτου συμπτώματος παρ᾽ ἐκείνης, οὐ μέντοι πάντων ὧν ἐκείνη κέκτηται: see this same argument repeated in different words 558—579; and elsewhere in this book. **337** *Praeterea* cet.: this argument is more fully developed 445—525. **345** *Mutua* cet.: with this and 558—579 comp. Epic. l. l. 64; and with this and much that follows comp. also 65 καὶ μὴν καὶ διαλυομένου τοῦ ὅλου ἀθροίσματος ἡ ψυχὴ διασπείρεται καὶ οὐκέτι ἔχει τὰς αὐτὰς δυνάμεις οὐδὲ κινεῖται, ὥστ᾽ οὐδ᾽ αἴσθησιν κέκτηται. οὐ γὰρ οἷόν τε νοεῖν αὐτὴν αἰσθανομένην, μὴ ἐν τούτῳ τῷ συστήματι καὶ ταῖς κινήσεσι ταύταις χρωμένην, ὅταν τὰ στεγάζοντα καὶ περιέχοντα μὴ τοιαῦτ᾽ ᾖ ἐν οἷς νῦν οὖσα ἔχει ταύτας τὰς κινήσεις.

350—357: to say that the body has no sense, and that the soul spread through it alone feels, is to contradict a self-evident truth: but it is said when the soul departs, the body has no sense: yes, because sense like much else is no inherent property, but an accident only. **350** *refutat*: as this cannot be really disproved, but only denied, Lambinus' *renutat* is very specious: but *refutat* may well imply 'tries to disprove' or 'thinks he disproves'. **353** *man. ver.*: not only true, but manifestly true. **354** *corpus sentire* = corporis sensus: see n. to I 331. *adferet* i.e. rationem adferet: thus we have had more than once *reddere* =

rationem reddere: comp. Cic. Tusc. disp. I 70 *credo equidem in capite, et cur credam adferre possum*; and n. to I 566 *possit reddi*. **355** *palam dedit* = palamfecit: comp. II 568 *palam est*, and n. to IV 41: *quod* is the relative. **357** *proprium* = καθ' αὑτὸ συμβεβηκός or *coniunctum*: see I 451: sense is a mere *eventum*, which comes to both body and soul by their reciprocal action one upon the other; and when this ceases, all sense ceases for both alike. Lach. I now see to be mistaken in marking off this and the next two paragraphs, as not connected with what precedes and follows: the above vss. are a manifest continuation and completion of the preceding argument; are in fact a summary of Epic. l. l. 64 διὸ ἀπαλλαγείσης τῆς ψυχῆς οὐκ ἔχει τὴν αἴσθησιν (τὸ σῶμα)· οὐ γὰρ αὐτὸ ἐν ἑαυτῷ ταύτην ἐκέκτητο τὴν δύναμιν, ἀλλ' ἑτέρῳ ἅμα συγγεγενημένῳ αὐτῷ παρεσκεύαζεν, ὃ διὰ τῆς συντελεσθείσης περὶ αὐτὸ δυνάμεως κατὰ τὴν κίνησιν σύμπτωμα αἰσθητικὸν εὐθὺς ἀποτελοῦν ἑαυτῷ, ἀπεδίδου κατὰ τὴν ὁμούρησιν καὶ συμπάθειαν καὶ ἐκείνῳ, καθάπερ εἶπον: it gets for itself and imparts in turn sense to the soul. At the same time this and succeeding paragraphs are clearly in an unfinished state, their connexion being often so loose that they might be interchanged in a variety of ways without loss to the general argument. But surely it was the poet himself who left them in this inchoate condition. **357** *in aevo* = in vita; so *ex ineunte aevo* five or six times = ex ineunte vita: we have also in Lucr. *aevi florem*; *Degitur hoc aevi*; *partem maiorem conteris aevi*; *tolerarit aevom*; *exigat aevom*; *colere aevom*; *consumit aevom*; *degebant aevom*: the poetical *aevom* having the various senses of *vita* and *aetas*; and *in aevo* being used here as *in aetate* by Plautus. **358** *quam exp. ante*: see n. to 973 *quam nascimur ante*: my correction of this v. which I now believe to be the poet's, is I think specious: *quam* was put in the margin, having become illegible and passed into *um* in the v., and the *aevo* came from *aevo* at the end of the prec. v. The body loses sense, you say: yes, certainly, it loses sense, a mere accident; just as *during life* it loses many other things, strength, beauty, etc. before the *anima* is expelled; for the sense shews that *anima* is nomin. of *expellitur*, i.e. anima nondum dimissa: a fortiore, dimissa.

359—369: the assertion that the eyes cannot see, but that the mind sees through them, as through a door, is contradicted by their sense: nay bright objects often hinder the eyes from seeing them; but this could not happen to doors; nay if eyes act as doors, we ought to see better by entirely taking away these doors. **359** foll. Sextus adv. math. VII 350 says οἱ δὲ αὐτὴν (τὴν διάνοιαν) εἶναι τὰς αἰσθήσεις, καθάπερ διά τινων ὀπῶν τῶν αἰσθητηρίων προκύπτουσαν, ἧς στάσεως ἦρξε Στράτων τε ὁ φυσικὸς καὶ Αἰνησίδημος: Lassalle Herakl. I p. 316 well compares with this what Sextus l. l. 130 says of Heraclitus, ἐν δὲ ἐγρηγορόσι πάλιν διὰ τῶν αἰσθητικῶν πόρων ὥσπερ διά τινων θυρίδων προκύψας (ὁ ἐν ἡμῖν νοῦς) καὶ τῷ περιέχοντι συμβαλὼν λογικὴν ἐνδύεται δύναμιν, and suggests that a comparison of this passage on the one hand with that quoted just above and on the other with this of Lucr. makes it highly probable that the illustration here employed came from Heraclitus: in what relation to him Aenesidemus stood is well known; the other, the peripatetic Strato of Lampsacus who went by the name of ὁ φυσικός, seems also to have been much indebted to him. This connection in the present case will appear yet more probable, if we compare Tertull. de anima 14 near end, *non longe hoc exemplum est a Stratone et Aenesidemo et Heraclito; nam et ipsi unitatem animae tuentur quae...per sensualia variis modis emicet*: the doctrine here assailed by Lucr. is lucidly stated by Cic., Tusc. I 46 *nos enim ne nunc quidem oculis cernimus ea quae videmus; neque est enim ullus sensus in corpore, sed, ut non physici solum docent, verum etiam medici qui ista aperta et patefacta viderunt, viae quasi quaedam sunt ad oculos, ad auris, ad naris a sede animi perforatae*: he adds *animum et videre et audire, non eas partis quae quasi fenestrae sint animi*; and so Epicharmus νόος ὁρῇ καὶ νόος ἀκούει, τἆλλα κωφὰ καὶ τυφλά. **361** *Difficilest* I keep: V 526 *quid in hoc mundo sit eorum ponere certum Difficile est*: *difficile* there, and III 328 and 330 *haud facile est* really mean 'it is not possible' according to that common rhetorical device of bringing your meaning out more strongly by understating it; and this is the sense here. To be sure if you press the word *dicere*, it is possible enough to *say* this or anything else; but then *Desiperest* is equally out of place; for the wisest man may *say* it, as well as the most foolish; and indeed 'it is impossible' only means 'it is absurd': Livy VIII 40 3 *nec facile est aut rem rei aut auctorem auctori praeferre*: yet literally this is easy enough to do. **362** I now retain, though the v. is obscure and incomplete: for this sense of theirs draws on and forces (? the soul) to the very *acies* of the eyes. **364** *Lumina luminibus*, another instance of false antithesis: see n. to I 875. **367—369** he concludes his case here, as so often elsewhere, with a brief argument addressed to the common sense of men, which here, as I 915, takes the form of a sarcasm: see the instances given at I 984—987. **369** *postibus* appears to mean the door-posts together with their *fores*: so it was understood by Lactant. de opif. dei 8, where he assails this, as he terms it, *ineptissimum argumentum* of Lucr.: *quoniam evulsae cum postibus fores plus inferunt luminis*.

370—395: you must not believe what Democritus teaches, that the atoms of the soul alternate one by one with those of the body, and are therefore as many in number: they are in fact not only much smaller, but also much fewer; not enough to awaken sense through the body, which often therefore does not feel very small things that come in contact with it; they not exciting any part of the soul. **370** *possis*; see n. to I 327. **371** recurs V 622; and proves that *Democriti* goes with what follows. *Dem. sancta sententia*: Lucilius has *Valeri sententia dia*, Horace *sententia dia Catonis*. *viri* thus coupled with a proper name and without an epithet is curious; its force is much the same as that

which it has in *Arma virumque* and Aen. IV 3 *Multa viri virtus.* 372 *privis*, 389 *priva*, here and elsewhere in Lucr. are exact synonymes of *singula.* 373 *variare* is of course neuter here, as often in Lucr. This is another leading point of difference between Epicurus and Democritus, and one we should not have known of but for this passage: Arist. de anima I 5 at beg. merely says of Democritus that his ψυχή is ἐν παντὶ τῷ αἰσθανομένῳ σώματι, which would be quite as true of Epicurus', who in many recorded points agreed with him on this question as on others, such as making the soul consist of the smallest and roundest atoms. 374 *animae elementa*: VI 755 *Sed natura loci ope*: comp. too Virg. geor. II 144 *tenent oleae armentaque laeta*: the only two cases where Lucr. lengthens by the caesura a short vowel, II 27 and V 1049, occur likewise in the middle of the fourth foot. *minora*, as proved at length 179—230. 377 *dumtaxat*: see n. to II 123. 379 *Corpora* are any of these small external bodies, a grain of dust etc.; whereas *in corpore* is our body on which these fall: the word is thus used with his usual indifference to ambiguity: see n. to I 875. Then notice the *prima* of 378, which = an adv. whereas in 380 *prima ex.* = primordia; though from the turn of the sentence, you would think there was an antithesis in these two uses of *prima*, there being none whatever. There is thus no occasion to read *priva* with Bentl. in these two places, which would then give *exordia* by itself the force of *primordia* which it nowhere has in Lucr. If a grain of dust touch the body without being felt, then the distance between two atoms of the soul must be greater than this grain.

381 *Nam cet.*: Lucr. does not venture to say how few they are compared with those of the body; but these instances prove he thought the disproportion to be very great: the foot of a gnat or a grain of dust touching the body must touch thousands and thousands of atoms: if then these can often fall on the body without being felt, that is without touching any atoms of the soul, these must be vastly fewer than those of the body. But does not the body feel as well as the soul? yes; he has elaborately proved already that the one feels as well as the other, and that neither of the two can possibly feel without the other; but he has also shewn that the *initus motus* must proceed from the *anima*, and not merely from the *anima*, but from that part of it which is the *animus*, and not merely from the *animus*, but from that fourth nameless substance in it; the *anima* and *animus* then form one connected whole in the body; if therefore any atoms of the *anima* are moved they will at once communicate with the *animus*, and sense will commence and be imparted to the whole *anima*, and from the *anima* to the body which will then feel. But many atoms of the body he argues may be touched without any part of the soul being moved, and therefore without there being any commencement of sensation: see what presently follows, 391—395. *adhaesum*: this word occurs three times in Lucr. and seems to be found

nowhere else: he dearly loves these substantives in *-us.* 383 *aranei*: this contraction is forced on him by the necessity of the metre. 387 *levitate...gravatim*: see n. to II 1054: Ov. met. X 738 *male haerentem et nimia levitate caducum* (florem). 390 *et cetera* is exactly the English 'etc.': II 812 *nigrum cum et cetera sentit*; 855 *odorem—sonitum—saporem—frigus—vaporem, Cetera.* 391 *ciendum semina*: another instance of this idiom so common with him: see n. to I 111. 392 393 wrongly transposed by Marullus, and in all editions from Junt. to my second: *primordia* is put in the dependent instead of the leading clause, as so often in Lucr.: see n. to I 15: *ciendum est multa prim. corporis priusquam sem. anim., cor. nos. imm., sentiscant haec primordia concussa esse.* 393 *sentiscant*: IV 586 *sentiscere*: the word seems to occur nowhere else. 394 *tuditantia*: see n. to II 1146. 395 he seems here briefly to indicate the process spoken of at 381, that of the particles of the *anima* meeting, moving the *animus*, which excites sense, reacts on the rest of the *anima* and then on the body, thus at last exciting its sensation.

396—416: the *animus* has more power over life than the *anima*: without the *animus* the *anima* cannot remain one instant in the body, but if the former is safe, much of the latter may be cut off without destroying life: the *animus* is like the pupil of the eye, the least hurt to which destroys the sight; the *anima* is like the rest of the eyeball, much of which, not all, may be cut away and sight continue. 396 *est...coercens*: II 1089 *generatimst rebus abundans*: see n. there; and comp. Livy V 34 6 *quod quidem continens memoria sit.* *vitai claustra*: see n. to I 415. 397 *dominantior* recurs VI 238: see n. to IV 961 *divisior*, *distractior.* 398 *mente animoque*, 402 *mens animusque*, here as elsewhere mere pleonasms. 399 obs. *partem pars.* 401 comp. IV 924 *Aeterno corpus perfusum frigore leti.* 403 *Quamvis est*: 705 *quamvis ..eunt*; IV 426 *quamvis est.* 404 *membris* must be the parts yet left or the *truncus*; but it is very harsh, considering the *membris* of 403. 405 *aetherias*: see n. to I 250 and II 1115: when Lach. was dealing so remorselessly with the *aetheriae aurae* of Lucr. and Virgil, he ought not to have left unscathed the striking expression of Aen. VI 436 *quam vellent aethere in alto*, i.e. merely in the upper air on earth; imitated by Sen. Hipp. 501; 848; Oed. 220: and when Sen. Herc. Oet. 893 says *Superest et auras ille caelestes trahit*, an imitation of Aen. III 339 *superatne et vescitur aura*, he almost comments on I 546 *si vescitur aura Aetheria*: both Ovid and Seneca too have *aetherias auras* after Lucr. and Virgil; [and Mart. I 6 1 *Aetherias..per auras.*] 406 *Si non omn., at*: II 1017 *Si non omnia sunt, at multo* cet.; Cic. pro Sest. 7 *ut ille..si non omnem, at aliquam partem maeroris sui deponeret*; Catull. 54 *Othonis caput (oppido est pusillum) Et, trirustice, semilauta crura, Subtile et leve peditum Libonis, Si non omnia, displicere vellem Tibi* cet.; Lucil. I 33 Muell. *Si non amplius, at lustrum hoc protolleret*

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aevi: 'Hor. sat. I 9 34 adoleverit aetas' J. E. M.; where Kirchner cites Livy I 4 8; Aen. XII 438. Wak. well compares Virg. geor. II 362, 367 *Ac dum prima novis adolescit frondibus aetas, Inde ubi iam validis amplexae stirpibus ulmos*; for in what precedes and follows Virgil shews that his mind was saturated with the verses of Lucr.: comp. 363 *se laetus ad auras Palmes agit laxis per purum immissus habenis* with V 786 *Arboribusque datumst...per auras Crescendi magnum inmissis certamen habenis*: 360 *contemnere ventos Adsuescant*, 365 *Ipsa acie nondum* cet. with II 448 *Prima acie constant ictus contemnere sueta*: 351 *Qui saxo super atque ingentis pondere testae Urgerent* with III 892 *saxi, Urgerive superne obtritum pondere terrae*: 324 *genitalia semina*, 325—327 *Tum pater—fetus*, 328 *Avia tum resonant avibus virgulta canoris*, 331 *Laxant arva sinus, superat tener omnibus umor, Inque novos soles audent se gramina tuto Credere* and 47 *Sponte sua quae se tollunt in luminis oras*, 336—345 followed by the Lucretian *Quod superest*, with V 851 *genitalia semina* in a different sense, I 250 foll. *Postremo pereunt imbres, ubi eos pater aether* cet., 256 *Frondiferasque novis avibus canere undique silvas*, I 809 *tener umor*, V 806 *umor superabat in arvis*, 771 *Quod superest*, 780 *Nunc redeo ad mundi novitatem et mollia terrae Arva, novo fetu quid primum in luminis oras Tollere et incertis crerint committere ventis*, and then follows the description of the early world of which Virgil's is a summary: 310 *Praesertim si tempestas...glomeratque ferens incendia ventus* with II 32 and V 1395 *Praesertim cum tempestas*, IV 871 *glomerataque multa vaporis Corpora quae stomacho praebent incendia nostro*, the words like, the meaning quite different: 260 *Excoquere et magnos scrobibus concidere montis*, 295 *Multa virum volvens durando saecula vincit*, 297 *media ipsa* with I 201 *Transire et magnos manibus divellere montis Multaque vivendo vitalia vincere saecla*, V 905 *media ipsa*: 291 *auras aetherias*, 287 *in vacuum* Lucretian expressions: 281 *ac late fluctuat omnis Aere renidenti tellus* with II 325 *totaque circum Aere renidescit tellus*: 250 *ad digitos lentescit habendo* with I 312 *Anulus in digito subter tenuatur habendo*: 246 *At sapor indicium faciet manifestus et ora Tristia temptantum sensu torquebit amaro* with II 401 *foedo pertorquent ora sapore*, IV 634 *triste et amarumst*: 217 *Quae tenuem exhalat nebulam fumosque volucris* with V 253 *Pulveris exhalat nebulam nubesque volantis*: 209 *Antiquasque domos avium* with I 18 *Frondiferasque domos avium*: 165 *argenti rivos aerisque metalla Ostendit venis atque auro plurima fluxit; Haec genus acre virum* with V 1255 *Manabat venis ferventibus...argenti rivus et auri, Aeris item et plumbi*, 862 *genus acre leonum*: 149 *atque alienis mensibus aestas* with I 181 *atque alienis partibus anni*: 151 *saeva leonum Semina* with III 741 *triste leonum Seminium*: 140 *tauri spirantes naribus ignem* with V 30 *equi spirantes naribus ignem*: 144 *Implevere; tenent oleae armentaque laeta* with the rhythm of V 202 *Possedere, tenent rupes vastaeque paludes*, and then 411 *segetem densis obducunt sentibus herbae*, 237 *validis*

terram proscinde iuvencis, 263 *id venti curant gelidaeque pruinae*, 293 *non hiemes illam, non flabra neque imbres Convellunt*, 47 *Sponte sua quae se tollunt in luminis oras*, also I 197 *multo spectata labore Degenerare tamen, ni vis humana quotannis*, 45 *Depresso incipiat iam tum mihi taurus aratro* with passages of Lucr. immediately following the one last quoted, V 206 *id natura sua vi Sentibus obducat, ni vis humana resistat Vitai causa valido consueta bidenti Ingemere et terram pressis proscindere aratris*, 212 *Sponte sua nequeant liquidas existere in auras, Et tamen interdum magno quaesita labore*, 216 *Aut subiti peremunt imbris gelidaeque pruinae Flabraque ventorum violento turbine vexant.* Just after where we began, 376 *Frigora nec tantum cana concreta pruina* with III 20 *neque nix acri concreta pruina*: 402 *Atque in se sua per vestigia volvitur annus* with IV 472 *Qui capite ipse sua in statuit vestigia sese*: 428 *Vi propria nituntur opisque haud indiga nostrae* with II 650 *Ipsa suis pollens opibus, nil indiga nostri*: 461 foll. *Si non* cet. with II 24 *Si non* cet.: 475 *Me vero primum dulces ante omnia musae Quarum sacra fero ingenti percussus amore*, 478 *Defectus solis varios lunaeque labores, Unde tremor terris*; 482 *Hiberni, vel quae tardis mora noctibus obstet* with I 923 *Percussit thyrso laudis spes magna meum cor Et simul incussit suavem mi in pectus amorem Musarum*, V 751 *Solis item quoque defectus lunaeque latebras*, VI 287 *Inde tremor terras*, V 699 *noctes hiberno tempore longae Cessant*: 490—492 *Felix qui potuit rerum cognoscere causas* cet. have been compared at I 78 with various vss. of Lucr.: 500 *Quos rami fructus, quos ipsa volentia rura Sponte tulere sua, carpsit* compared by Macrob. with V 937 *Quod sol atque imbres dederant, quod terra crearat Sponte sua, satis id* cet.: 510 *gaudent perfusi sanguine fratrum* comp. with III 72 *Crudeles gaudent in tristi funere fratris*: 523 *dulces pendent circum oscula nati* with III 895 *nec dulces occurrent oscula nati Praeripere.* **449** *viribus*, **450** *vis*, **451** *viribus*, **452** *viribus*: see n. to I 875. **450** *auctior* is used by Caesar Livy and others. **456** *ceu fumus*: 614 *vestemque relinquere* (se), *ut anguis*; where Lach. in answer to Madvig opusc. pr. p. 312, who objected to the nomin., quotes also 426 *minoribus esse Principiis factam quam liquidus umor aquai*; IV 698 *maioribus esse creatum Principiis quam vox*; as well as examples from Varro and others: 'Livy XLII 37 8 *Messenii adque Elii*; Tac. ann. XIII 19 *pari ac Nero gradu* [*Neronem* Nipp. Ritter]' J. E. M.: and so Cicero himself, writing to Caesar, ad Att. IX 11 A 3 *eandem me salutem a te accepisse putavi quam ille.* For the usage in Greek see Dobree advers. II p. 223—226. Comp. 598 *Emanarit uti fumus diffusa animae vis*, and Sextus adv. math. IX 72 καὶ καθ' αὑτὰς δὲ διαμένουσι καὶ οὐχ, ὡς ἔλεγεν ὁ Ἐπίκουρος, ἀπολυθεῖσαι τῶν σωμάτων καπνοῦ δίκην σκίδνανται: the same metaph. in Plato Phaed. 70 ὥσπερ πνεῦμα ἢ καπνὸς διασκεδασθεῖσα. **458** *fessa fatisci* recurs V 308.

459—525: again, as the body is liable to disease, so is the mind to

cares and fears; therefore it should partake with the other of death: again when the body is ill, the mind often wanders and is senseless before death: it ought then to die, since disease reaches it; for that which feels disease must die: again in drunkenness the mind shares in the disorder of the body; but if it can thus be disordered, it may be killed by a more powerful cause: again in a fit of epilepsy, the sinews stiffen, the man foams at the mouth and the like; his mind is at the same time disordered by the attack; then when the fit is over he rises up reeling and gradually comes to his senses: when the mind then is thus tempest-tost in bodily disease, how could it battle for ever with storms in the open air? again the mind may be healed like the body; it is therefore mortal; for that which is immortal allows not of any changing or shifting of parts: the healing therefore of the mind by medicine and its suffering from disease both alike prove it to be mortal. **459** foll.: comp. what Cic. Tusc. I 79 says of Panaetius, *alteram autem adfert rationem, nihil esse quod doleat quin id aegrum esse quoque possit; quod autem in morbum cadat, id etiam interiturum; dolere autem animos, ergo etiam interire*: what precedes illustrates Lucretius' last argument.
460 *Suscipere* would come more naturally in the same clause with *videamus*: comp. 510: this then might be added to the examples given in n. to I 15. **462** *Quare* cet.: for death results from some disease or pain: 472 *Nam dolor ac morbus leti fabricator uterquest.* **464** *dementit* is found in no other writer of authority. **467** *voces* i.e. conclamantium: the custom would in this case be very appropriate in order to decide whether it were a lethargy or death: the friends were still *ad vitam revocantes*: *iam conclamatum est* could not yet be said; [comp. Prop. v 7 23 and Paley there.] **469** comp. II 977 *Et lacrimis spargunt rorantibus ora genasque.* **467—469** Ov. trist. III 3 41 *Nec dominae lacrimis in nostra cadentibus ora Accedent animae tempora parva meae? Nec mandata dabo, nec cum clamore supremo Labentes oculos condet amica manus?* **479** *tardescit* seems a ἅπαξ λεγόμ. **480** *iur. gl.*: Plaut. asin. 912 *pulcre hoc gliscit proelium.* **481** *Et iam cetera de genere hoc*, or *Cetera de genere hoc* or *horum* are favourite phrases of Lucr. imitated by Hor. sat. I 1 13. **483** *corpore in ipso* = intus in corpore: 506 *corpore in ipso* is opposed to 508 *sine corpore*: see n. to IV 736.
492 *Nimirum* cet.: Lach. well shews that here begins the explanation of the symptoms mentioned above. **493** *agens animam*: Cic. Tusc. disp. I 19 *animum autem alii animam, ut fere nostri. declarat nomen; nam et agere animam et efflare dicimus*; ad fam. VIII 13 2 *Q. Hortensius, cum has litteras scripsi, animam agebat*; Catull. 63 31 *anhelans vaga vadit animam agens.* **494** *fervescunt*, and therefore foam, with reference to *spumat*; the winds answering to the *animam.* **498** *Qua*: see n. to I 356. *Qua* cet.: i.e. qua consuerunt ferri et est illis munita via, 'a regularly made road'. **500** *docui*, in 492. **502** *reflexit* neut.: so IV 1130 *vertunt*; V 831 *vertere cogit*; 1422 *in fructum convertere*; IV 135 *vertere* is ambiguous: VI 823 *qua derigit aestus*; 1122 *immutare coactat*: comp. also n. to II 126 *turbare* = turbari: VI 595 *movere*; 1190 *trahere*; 519 *tenere*; and I 397 *Ipse in se trahere.* *redit* is the present. **504** *vaccillans*: so spelt in Nonius p. 34 who cites Cic. Phil. III 31, and there the oldest ms. of Baiter and Halm has *vaccillante*; and so in Apul. met. V 25: I find also from a quotation in the Libri catal. of mss. 299 that a ms. of Cyprian attributed to the 9th century has *vaccillat.* This would confirm its derivation from the waddling gait of the *vacca*: Lucr. six times gives it the quantity it has in other poets; here A and B rightly have the *cc*: see n. to I 360; and comp. *mamma mămilla, offa ŏfella, tintĭno tintinnabulum, Porsenna Porsēna, Catillus Catĭlus*; and perhaps *currus cŭrulis, quattuor quăter, littera lĭtura.*—Joh. Schmidt, Indog. Vocal. p. 104, denies its connexion with *vacca*: he says *vācillo* is from *vancillare*, derived from *vāculus* = *vanculus*, and compares it with Sanscrit and Teutonic words: the unaccentuated *a* of *vacillo* is then shortened; comp. *ăcerbus, mŏlestus, conscrĭbillo.* His reasoning is acute and may be right: at the same time he does not account for the spelling with *cc*; for *bacca buccina bracca succus muccus* for *baca* etc. are mere modern barbarisms. With the above comp. what Celsus III 23 says of an epileptic fit, *inter notissimos morbos est etiam is qui comitialis vel maior nominatur. homo subito concidit, ex ore spumae moventur; deinde interposito tempore ad se redit et per se ipse consurgit*: the poet's description is probably taken directly from some medical treatise; and we need not look for minute completeness any more than in his account of the plague. **506** *Haec*, the *animus* and *anima.* **513** *traiecere*: comp. II 951 *eiecit*, and n. there. **514** *prosum* and **534** *Introsum*: see n. to 45. *prosum* seems to have the same force that *prorsus* so often has in Sallust: Cat. 15 5; 23 2; Iug. 23 1; etc.: 'in short', 'to say no more'. *hilum* in an affirmative sentence occurs also IV 515 *libella aliqua si ex parti claudicat hilum*: I find no other example; but VI 576 *perhilum* is also affirmative. **515** Priscian inst. X 8 'Lucilius in III *Conturbare animam potis est quicumque adoritur*' doubtless blunders. **519 520** so often recurring. **524** *eff. praecl.*: I 975 *effugium praecludit*, where see note. **525** *Ancipiti*, alike whether the *animus* sickens or is healed. *refutatu*, another ἅπαξ λεγόμ. in *-us*, = refutatio: see n. to I 653.

526—547: again a man often loses sense and life limb by limb; the soul then thus severed and lost must be mortal: or if you say it draws itself together from all the limbs, then the spot in which it is thus gathered ought to have a livelier sense; but this is not so; it therefore disperses, that is dies: nay grant that it can contract itself, you must admit it to be mortal, for equally in this case it gradually deadens, and sense and life quit the man. **526** *ire*: so 531 *itque*; VI 1243 *contagibus*

ibant Atque labore: somewhat similar are II 962 *quo decursum prope iam siet ire et abire*; and III 593 *labefacta videtur Ire anima.* **527** is the most effective instance of sound answering to sense, produced by the simplest means, that I know of in the whole range of Latin poetry. **529** *post inde*: he also has *post deinde*, VI 763 *post hinc*, V 1007 *tum deinde*: *post inde* is found in Enn. ann. 11, and in Cic. in Pison. 89; Plaut. trin. 768 *quid tum postea?* **531** *hoc* I take in the sense it has in IV 658 *Hoc ubi quod suave est* cet.; 1093 *Hoc facile expletur* cet.; VI 274 *Hoc ubi ventus* cet.; Virg. geor. II 425; [Catull. 44 13 *Hoc* (O, Baehrens: *Hic* G, vulg.) *me gravedo frigida et frequens tussis Quassavit*; Lucil. VI 29 *Hoc tu apte credis quemquam latrina petisse?*; Plaut. Amph. 164 *Opulento homini hoc servitus durast*; Pseud. 826 *Hoc hic quidem homines tam brevem vitam colunt*;] 807 *Hoc ego fui hodie solus obsessor fori*; rudens 388 *hoc sese excruciat animi, Quia*, cet.; Pliny epist. II 19 3 *tamen hoc quod sedent quasi debilitantur*: see Hand for other instances: it almost = ergo; and the emphatic words of the sentence *Sc.* cet. come first, as so often in Lucr.: VI 1246 *Optimus hoc leti genus ergo quisque subibat*: see n. to I 419: *hoc* might have the somewhat different meaning it has in Plaut. trin. 783 *hoc.. Suspicionem ab adulescente amoveris*: i. e. hac re. **532** *existit*: so II 796 *neque in lucem existunt primordia rerum*; V 212 *nequeant liquidas existere in auras*; [auct. bell. Afr. 7 6 *latent enim in insidiis cum equis inter convalles et subito existunt*; 69 1 *agmini eius extremo se offerunt atque ex collibus primis existunt*; Cic. Verr. IV 107 *spelunca quaedam.. qua Ditem patrem ferunt repente cum curru extitisse*: see too White.] **537** *in sensu*: 596 *in taetro tabescat odore*; II 819 *in quovis esse nitore*; III 188 *in ira Cum fervescit*; 295 *effervescit in ira*; 401 *artus in leti frigore linquit*; 826 *inque metu male habet*; Sen. epist. 74 27 *in eadem uterque forma fuit*: see n. to I 999. [Comp. also Cic. epist. II 12 3 *non essem quidem tamdiu in desiderio rerum mihi carissimarum*; XV 6 1 *qui ipsi in laude vixerunt.*] **540** *si iam libeat*: see n. to I 968. **545** *suis e partibus* I take to be the parts of the soul itself: comp. II 159 *ipsa suis e partibus una.* *obbrutescat*, a rare word: Afranius 420 has *obbrutui*: AB both spell it with one *b*; and so do the mss. of Nonius, and of Paulus Festi twice over: *opportunus* occurs in Lucr. five times: in each case either both AB or one or the other write *oportunus*: Servius to Aen. I 616 has '*applicat*: secundum praesentem usum per *d* prima syllaba scribitur: secundum antiquam orthographiam quae praepositionum ultimam litteram in vicinam mutabat, per *p*: secundum vero euphoniam per *a* tantum': i.e. only one *p* was sounded.

548—557: the mind is as much part of the man, as the ear or eye or any other sense: none of these can exist alone, but decay at once: so it is with the mind, which is as closely connected with the body as these are. **551** *atque.. ve*: see notes 1; and comp. Juv. IV 76 *de qua citharoedus Echion Aut Glaphyrus fiat pater Ambrosiusque choraules.* **553** *Sed tamen* cet. = sed in tempore quamvis parvo tamen licuntur: comp. Cic. de rep. VI 21 (somn. Scip. VI 3) *quem oceanum appellatis in terris, qui tamen tanto nomine quam sit parvus vides*; pro Sestio 140 *atque hunc tamen flagrantem invidia...semper ipse populus Romanus periculo liberavit*; [epist. II 16 7 *hoc aspersi, ut scires me tamen in stomacho solere ridere*; and perhaps Phil. I 7 *quae tamen urbs mihi coniunctissima plus una me nocte cupiens retinere non potuit*; Plaut. Stichus 99 *Bonas ut aequomst facere facitis, quom tamen absentis viros Proinde habetis quasi praesentes sint*;] Ter. eun. 170 *Tamen contemptus abs te haec habui in memoria*; and so Meineke seems rightly to explain Hor. od. I 15 19 *tamen heu serus adulteros Crines pulvere collines*, i. e. quamvis serus, tamen collines; the force of *tamen* is very much the same in IV 953, 988, 992. **555** *homine...quod vas*: see n. to 94; and for *vas* comp. 793 or V 137 *in eodem homine atque in eodem vase manere*; and n. to 440.

558—594: again body and soul depend for life one on the other: without the body the soul cannot give birth to vital motion, nor can the body without the soul continue and feel: mind and soul produce their sense-giving motions, because their atoms are kept in by the bodily frame: this they cannot do in the air; or else the air will be a body and an animal, if the soul can move in it as it moved in the body: often again in life the soul seems to fail and to be on the point of going: it is so shattered together with the body that a more violent shock would destroy it; how then could it exist a moment, not to say an eternity in the open air? therefore when the body dies, mind and soul die. **558** foll. *Denique* cet. clearly begins a new argument: in the last section he shewed that the mind, the *mens* or *animus*, not the *anima*, has a fixed seat, viz. in the breast, and cannot live away from the body, any more than the ear or eye; but there he says nothing of the body not existing without the mind. In our present section he shews the reciprocal dependence of soul and mind and of body one on the other: see what is said of Lachmann's punctuation in note 1. The soul runs through the whole body which depends on it, as much as it depends on the body. There is a striking resemblance between the language here and that of 323—349; only the conclusion proved is different. **558** *vivata potestas*: see 409 and n. there. **559** *coniuncta* is neut. plur. and must refer to *potestas* twice repeated; yet he usually employs the neut. only when the substantives are of different genders: this case is very exceptional, to which I know no parallel; and harsher than even II 400 *taetra absinthi natura ferique Centauri foedo pertorquent ora sapore*, where Lach. would prefer *pertorqueat.* *Inter se coniuncta*: 332 *consorti praedita vita.* **560** *edere*: II 443 *varios quae possint edere sensus*; 816 *variantes edere tactus.* **562** *sensibus uti*, which the soul enables it to do by

giving birth to sense-giving motions. 564 *seorsum corpore*, without *a*, appears an unusual construction. 569 *moventur motus*: a grecism. Epic. in Diog. Laert. x 66 concludes in the same way, οὐ γὰρ οἷόν τε νοεῖν αὐτὴν αἰσθανομένην, μὴ ἐν τούτῳ τῷ συστήματι καὶ ταῖς κινήσεσι ταύταις χρωμένην, ὅταν τὰ στεγάζοντα καὶ περιέχοντα μὴ τοιαῦτ' ᾖ ἐν οἷς νῦν οὖσα ἔχει ταύτας τὰς κινήσεις. 573 *Corpus enim* cet.: he has shewn again and again that reciprocity on the part of the body is necessary to enable the soul to begin to act and produce sense. 575 *in ipso corp.* i.e. intus in corpore: comp. 605, 506, 483 and n. there: that 576—590 (592—606) are to be transferred here will be manifest, when it is once pointed out. 578 *velle*: IV 518 *Iam ruere ut quaedam videantur velle.* 579 *supremo tempore* occurred I 546: VI 1192 *ad supremum denique tempus.* 581 *animo male factum est, male fit, male est* are all found in Plautus; the last in Terence. 582 *animam liquisse*: *animus* seems more usual in this phrase; as Caes. de bell. Gall. VI 38 4 *relinquit animus Sextium*; Suet. I 45 *repente animo linqui . . solebat*: Ovid heroid. II 130 *Linquor et ancillis excipienda cado.* 583 *repraehendere*: this spelling recurs 859; in three other instances AB have *repreh.*: for meaning see n. to VI 569 *reprehendere.* 585 *haec* appears to be the fem. plur., Lucr. never uses *hae*; see VI 456 *haec comprendunt*, and n. there; but *haec* may be neut. as 559 *Coniuncta.* 587 *prodita*: II 933 *aliquo tamquam partu quod proditus extet.* 588 *in aperto*: VI 817 *in apertum.* 589 *omnem . . per aevom*: II 561 *aevom . . per omnem*: see n. there. 594 *duobus* means of course the *animus* and *anima*, taken as one, and the *corpus*: comp. the conclusion of a very similar argument 348 *Ut videas quoniam coniunctast causa salutis, Coniunctam quoque naturam consistere eorum*, i.e. corporis atque animai.

595—614: when the soul leaves it the body rots away: a proof that the soul has come out of its inmost depths, to cause such utter ruin; the soul then must have been torn in pieces itself, ere it got out of the body: again a dying man feels not the soul escaping entire from him, but failing in this spot or that: if the mind were immortal, it would not mourn its dissolution, but its having to quit the cover of the body.
596 *in taet. od.*: Wak. quotes Aen. III 228 *tum vox taetrum dira inter odorem.* *taeter* is several times applied to *odor* by Lucr., still oftener to the sense of taste, sometimes to the sight. *in*: see n. to 537. 598 *uti fumus*: see Epicurus cited to 456 *ceu fumus.* 607 is the manifest sequence of the statement concluded at 606 (591). 610 *Verum* cet. i.e. omnis, understood from 607 *Nec quisquam*: see n. to II 1038.
611 *sensus alios*, the senses as well: see n. to I 116. *parti*: see n. to I 1111. 613 *Non tam*, followed not by *quam*, but 614 by *Sed magis*: comp. Plaut. trin. 688 *Nolo ego mihi te tam prospicere qui meam egestatem leves, Sed ut inops infamis ne sim*; Cic. de fin. I 1 *quidam autem non tam id reprehendunt, . . sed tantum studium tamque multam operam ponendam in eo non arbitrantur*; and see Madvig's note, and also his emend. Liv. p. 573; where in XLIV 25, to answer *non tam quia*, he adds in 3 *ceterum*; but to me it seems that after a long quasi-parenthesis the *non tam* is answered in 5 by *magis cupiit.* 614 *ut anguis*: see n. to 456.

615—623: why too is the mind never born in the head or foot, but in one fixed spot, if not because it is only a part of the body; and the body, like other things has its own fixed organism, so that every member has in it its proper place? effect ever follows cause, nor can fire arise in water, frost in fire. 615 *animi mens*: IV 758 *Mens animi vigilat*; V 149 *animi vix mente videtur*; VI 1183 *Perturbata animi mens*; Catull. 65 4 *Mens animi*; Plaut. epid. IV 1 4 *Pavor territat mentem animi.*
616 *unis*: II 159 *ipsa, suis e partibus una*; 919 *una eademque*; V 897 *nec moribus unis.* 617 *omnibus* I now take for the dat. masc. though it is somewhat harsh. 619 *ubi quicquid*=ubi quicque: see n. to II 957. 620 *mult. partitis artubus esse*: comp. II 909 *Aut simili totis animalibus esse*; and VI 268. 618—621 'the constr. seems to be "reddita sunt cuique certa loca cet.: [redditum est cuique] ubi—creatum": then in 620 it may be a question whether *esse* depends on *possit* or is subject of *redditum est cuique* again. May not *cuique* and *quicquid* be taken not specially for parts of the body, but universally? There is a law which appoints to each several thing its place of birth, its place to abide in, and its existing with such a manifold organisation of joints, that etc.' J. E. M.—This paragraph as it stands has very many difficulties: others have seen that there is no very close connexion with what precedes and follows; and that the language much resembles 784—797. At the same time it cannot be transferred there: the argument is far from being the same: there existence of both the soul and the mind out of the body is denied: here the existence of the mind alone anywhere but in its own proper spot in the body, etc. In my earlier editions, thinking as I now think that 620 621 must refer to the organised body, I inferred that *cuique* and *quicquid* must refer to parts of the body. To this Professor Mayor's argument is directed: *cuique* and *quicquid* I allow are better taken generally; as 787 *Certum ac dispositumst ubi quicquit crescat et insit*, since the whole of that passage has apparent reference to our own. As for the constr. of 619 Prof. Mayor's may be simpler; but I took it as=certa loca reddita sunt ubi quicque nascatur et natum durare possit. I now believe that certainly one v. and probably two at least are lost after 619; and that this might shew the meaning of what is wanting: *Certum ac dispositum naturae legibu' constat. Hoc fieri nostrum quoque corpus foedere debet, Atque ita* cet. 622 623 comp. 784 *Denique in aethere non arbor, non aequore in alto Nubes esse queunt* cet. and V 128 foll. 623 *Fluminibus*: *in* understood from *in igni*: IV 98 *speculis in aqua splendoreque in omni*; 147 *ubi aspera*

saxa Aut in materiem ligni pervenit; v 128 *in aethere non arbor, non aequore salso*: Aen. v 512 *notos atque in nubila fugit.*

624—633: again if the soul is immortal and can exist alone, it must have the five senses, as imagined by writers and painters; but none of the senses can exist alone away from the body. **626** *sens. auctam*, **630** *sensibus auctas*: I 631 *quae nullis sunt partibus aucta*; Catull. 64 165 *quae nullis sensibus auctae.* **631** *sorsum* i.e. a corpore: comp. II 910 foll.: Lucr. writes indifferently *sorsum* and *seorsum, seorsus* and *sorsus*, when they are equally dissyllables: *seorsum* is sometimes too a trisyllable; IV 491 foll. within three or four vss. we have *seorsum, seorsus* and *sorsum*; and *seorsum* both trisyl. and dissyl.; v 447 448 *sorsum, Seorsus.* *deorsum* and *dorsum*, both found in inscriptions, may be compared: see also n. to II 202. **633** *per se* i.e. sine corpore: to *sentire* and *esse, animae* is understood from 632.

634—669: since life and sense pervade the whole body, if it be cut in two by a sudden stroke, the soul must also be divided; but what is divided cannot be immortal: a soldier's arm or foot or head cut off in the heat of battle will shew for a time remains of sense and motion; a serpent chopped in pieces will writhe and with the severed mouth seek to reach the other pieces of the body: now you cannot say that in each part there is an entire soul; therefore the soul has been divided, and therefore is as mortal as the body. **639** *dissicietur*: see n. to II 951. **642** *falciferos currus* recurs v 1301: in prose *falcatus.* **643** *permixta caede calentes* recurs v 1313; [comp. Catull. 64 360 *Cuius iter caesis angustans corporum acervis Alta tepefaciet permixta flumine caede.*] **647** *in...studio quod dedita*: IV 815 *quibus est in rebus deditus*; Catull. 61 101 *in mala Deditus vir adultera*; [Arnob. I 59 *quosdam in sapientia deditos.*] **648** *petessit*: v 810 *aurasque petessens*; Cic. Tusc. disp. II 62 *qui hanc petessunt nullum fugiunt dolorem*: Festus p. 206 says it is *saepius petere*; verbs of this form being generally accounted desiderative. **650** *abstraxe*: see n. to I 233. **653** *moribundus*: see n. to 129: Aen. x 341 *Dextera.. moribunda.* **658** *utrumque* is the Greek ἀμφότερον, our 'both', as VI 499 *utrumque Et nubis et aquam*; where see note: perhaps *minanti* may be retained, 'protruding from': comp. Virgil's *scopulique minantur In caelum.* **660** *ancisa* seems not to occur elsewhere: see Key's Essays p. 9: he compares it with *anquiro* and *anhelo*; and the *an* with ἀνά. [Comp. Ov. fasti III 377 *Atque ancile vocat, quod ab omni parte recisum est*; also Varro l. Lat. VII 43 *ancilia dicta ab ambecisu, quod ea arma ab utraque parte, ut Thracum, incisa*]. **662** *Ipsam se*, the mangled body and tail. **663** *ardenti*, burning with the torture. **665** *at ea* cet. which is absurd; therefore etc.

670—678: if the soul is immortal, why cannot we recollect what happened before our birth? if the mind is so changed as to forget everything, that is very like death; so that even thus you must admit that the soul which then was, has perished, and that the one which now is, is newly made. **672** *super*=insuper: see n. to I 649. *anteactam* refers to *nascentibus*: the time before our birth. **675** *retinentia* appears to be a ἅπαξ λεγόμ. **676** *longiter*: see n. to I 525. **677** so that even granting this transmigration of souls, the soul that was before birth has really perished, and on entering a new body has really become a new and different soul: in the above passage he is evidently assailing the pythagorean metempsychosis, which Enn. ann. 10 thus states, *Ova parire solet genu' pennis condecoratum, Non animam; et post inde venit divinitu' pullis Ipsa anima.*

679—712: if the soul enters the body after it is fully formed, it should not seem to be so mixed up with it, but should have a hole to live apart in; whereas in fact it so penetrates the whole frame that the very teeth have feeling; it therefore has birth and dies; else it could not be so united with the body, nor being so united leave it entire: but if it can so enter and then spread itself over the whole body, then must it perish thus diffused; even as food transmitted into the body perishes and then furnishes out of itself another nature: thus the soul that entered will die, and another be formed out of it; thus still the soul will be mortal. **681** *vitae limen*: he has *leti limen* several times; see n. to II 960. **682** *conveniebat* i.e. *vivere* from 684. **688** *sensu partic.*: Plaut. miles 262 has the same constr., *non potuit quin sermone suo aliquem familiarium Participaverit de amica eri*; and truc. IV 2 35 *Si volebas participari.* **689** *Morbus* i.e. dentium: comp. VI 657 *alium quemvis morbi per membra dolorem? Op. e. s. p., arripit acer Saepe dolor dentes.* *stringor* seems a ἅπαξ λεγόμ. [**696** *exsolv...ex*: 'sonst nur mit blossem Ablativ' Draeger hist. synt. I p. 475.] **700** *Tanto quique magis* is repeated v 343; so VI 460 *Quam sint quoque magis*: *quique* is of course the abl.; and seems natural enough, though no other instances are found: is it similar to *qui* in *utqui*, etc.? see n. to I 755. *cum corpore fusa*=soluta et mixta cum corpore. **701** foll. comp. 756 *Quod mutatur enim dissolvitur, interit ergo*; *Traiciuntur enim* cet.: but in our passage 701 is more parenthetical; and the *enim* of 702 refers directly to 700. **710** *tum* i.e. at the time when this theory supposes it to enter the body.

713—740: are atoms of the soul left behind in the dead body or not? if they are left, it cannot be immortal, since it has left parts of itself behind; if it goes out entire, whence come worms and other living things into the carcase? but if souls come from without into these myriads of creatures, do they each create a body for itself, or enter bodies already formed? then why make a body, when they are better without? disease and cold and hunger come from the body: but were it ever so useful, they could not make it: if again they entered it already made, they could not unite with it so closely as to have sensation in common.

[**713** *necne*: 'Cic. Tusc. III 41 *sunt haec tua verba necne?*' Draeger hist. synt. I p. 324 D: he says these are the only two instances of *necne* in direct question.] **713** *linquontur*, **714** *lincuntur*: I 743 *relinquont*, V 1239 *relinqunt*; *lincunt* three times; *secuntur* seven times; IV 581 *locuntur*; 590 *loquontur*; 1018 *loquuntur*: all these forms probably, except perhaps the last, were in the mss. of Lucr. within a generation of his death: a proof of the excellence of our mss. in their spelling; as none even of Virgil's retains the old forms in so large a proportion as this. **715** *Haut erit ut possit* = haut poterit: 725 *est ut Quaerendum videatur*: see n. to I 620: on rhythm of v. see n. to II 1059. **717** *sinceris membris* taken as the parts of the soul would agree with 531 *Scinditur itque animae hoc quoniam natura nec uno Tempore sincera existit*: but I now take *sinc. mem.* to be 'from the untainted body', as Mr Paley suggested to me, in contrast to 719 *rancenti iam viscere*: with such use of *sinc.* comp. Virg. geor. IV 285 *Insincerus apes tulerit cruor.* *membris* has thus its usual force, the body opposed to the soul: comp. 120; 127; 439 *ex hominis membris ablata recessit*; 772 *membris exire senectis*; etc. **721** *Exos* is also found in his imitators Serenus Samonicus, and Arnobius [IV 8 *si exos genus humanum velut quidam vermiculi nasceremur.*] *perfluctuat* seems another ἅπαξ λεγ.: this is imitated by Arnob. VII 17 *fervescere vermibus et fluctuare.* **728** *ubi sint*: so *esse* in 789; 791; 795 *ubi esse et crescere possit.* **730** *neque* = non: see n. to II 23. **731** *Dicere* seems to be used here as a subst.: comp. IV 765 *meminisse iacet*; and n. to I 331: Livy XXVIII 27 3 *ad vos quemadmodum loquar nec consilium nec oratio suppeditat.* **734** *contage*: probably he wrote *contagei* or *contagi*, as IV 336 he has *contagĕ*: comp. V 930 *labi*, and see n. to I 978: but I 806 we find also *ut tabē nimborum.* **736** *Cum subeant*, and V 62 *Sed simulacra solere in somnis fallere mentem, Cernere cum videamur eum quem vita reliquit*, and 680 *Crescere itemque dies licet et tabescere noctes, Et minui luces, cum sumant augmina noctes*, as well as Cato de re rust. 90 *cum far insipiat, puriter facito*: in these cases *cum* with the pres. subj. or potent. seems to denote repetition; as *cum* seems clearly to be temporal in them all. Lach. says 'recte *cum subeant*: cum res ita comparata sit ut subeant corpus, esto iis sane utile sibi tum facere corpus': this to me explains nothing: Juv. XI 177 all the best mss. have *Omnia cum faciant, hilares nitidique vocantur.* **738** *utqui*: see n. to I 755.

741—775: again why do animals inherit the qualities of their parents, unless the mind like the body comes from a fixed seed? if the soul is immortal and passes into different bodies, why do not dogs and stags, hawks and doves, men and beasts exchange dispositions? they say the immortal soul changes with the change of body: false; for what changes is broken up, and therefore dies: if it be urged, a human soul always passes into a human body, a horse's into a horse, why then is not the child as wise as the man, the foal as the horse? the mind grows young in the young body you say: then is it mortal, since it thus loses its former properties: or how can the soul come to maturity with the body, unless its partner from the beginning? or why does it seek to quit the aged body? it need not fear its ruin; for an immortal runs no risk. **741** *triste leo. Sem.*: Virg. geor. II 151 *saeva leonum Semina.* *leonum Seminium*, 746 *suo...semine seminioque*, IV 1005 *quo quaeque magis sunt aspera seminiorum*: in all *seminium* has the same meaning, the race breed stock or seed collectively to which a creature belongs; therefore *leonum seminium* is not the young of lions, but the breed or race to which lions belong: comp. IV 998 *catulorum blanda propago*; 1232 *virum suboles* and n. there; and Virg. geor. III 101 *prolemque parentum* and the like. **746** *semine seminioque*, thus joined for the sake of the much loved assonance; as 753 *fera saecla ferarum*: see n. to I 826. **750** *Hyrcano*: Cic. Tusc. I 108 *nobile autem genus canum illud scimus esse* (in Hyrcania). **754** *quod aiunt*: comp. 1008 *Hoc, ut opinor, id est,.. Quod memorant* cet. **756** comp. 701 *Quod permanat enim dissolvitur, interit ergo.* **759** *Denique* has here the force which it has in some of the instances given by Hand Tursell. II p. 266 II 1, as Ter. Phorm. 325 *Vereor ne istaec fortitudo in nervom erumpat denique*: [comp. Sen. rhet. contr. I 4 10 *adulescens, denique adulteros excita.*] **762** *prudens*: Cic. Cato 20 *temeritas est videlicet florentis aetatis, prudentia senescentis*: *prudens* is the φρόνιμος of Aristotle; see eth. Nicom. VI 9. **764** *Nec tam doctus* cet. is added because 760 *animas hominum in corpora semper Ire humana* implies *animas equorum ire in corpora equina.* *fortis equi vis*: see 8. **765** *tenerascere*: the mss. of Pliny and Celsus appear to give the form *teneresco.* **766** *Confugient* with the infin. is unusual: *confugient* i.e. ad eam sententiam, *tenerascere* cet.: comp. II 1128 *fluere adque recedere...manus dandum est*: 'is it not similar to the use of *adducor ut res ita sit*, for *adducor ut credam rem ita esse*' J. E. M. *si iam fit*: see n. to I 968. **769** *Quove modo poterit* = quaeram praeterea quo modo possit. **770** almost the same as V 847. **772** *membris...senectis*: V 886 and 896 *aetate senecta*: *senecto corpore* is found in Sallust, and *senecta aetate* in him and Plautus; Mommsen inscr. regni Neapol. 3833 *Sed . cum . te . decuit . florere . aetate . iuenta . Interieisti . et liquisti in maeroribus . matrem .*: *senecta* and *iuventa* therefore must be originally adjectives: Lach. p. 44 quotes from Varro *senescendorum hominum, adolescendi humani corporis*; and from Verrius Flaccus *rebus florescendis*: *cretus concretus suetus* etc. are often thus used; Livy Ovid and others have *requietus*; see also n. to II 363. **774** *aet. sp. vet.*: see n. to II 1174.

776—783: again how absurd that immortal souls should be present at conception and fight who shall get the mortal body, unless indeed they bargain, first come first served! **776** *conūbia* or *conŭbja*? there

is no other certain example of the word in Lucr. as v 1013 *Conubium* is introduced by conjecture: many and recently Luc. Mueller de re metr. p. 258 argue for the two quantities of the word: the latter says 'notabile quidem debuit videri tot exempla durissimae synizesis cur noluerint vitare poetae ponendo *coniugium* vel *coniugialem* . sed enim augebitur admiratio reputantibus Lucani et Senecae, qui nunquam *i* vel *u* mutarunt in consonam, versus tales *Mox ubi conubii pretium mercesque solutast. Conubia vitat: genus Amazonium scias* . porro Statius synizesin cum alibi non plus septiens admiserit, in uno vocabulo *conubii*, si productam habet semper secundam, deciens octiens eam adhibuisse erit credendus': he further shews that the old grammarians Consentius and Servius hold it to be short in such cases. Conington to Aen. I 73 observes 'the analogy of *pronubus innubus* might be pleaded as proving a variation of quantity; but no clear instance of *conŭbium* occurs except in Sidon. Apoll.': Prudentius also has it short; and Claudian, a far higher metrical authority than any of the Christians, writes epist. II 18 *Vectigal meritae conubiale lyrae*: it is quite true that in the time of all these writers the native feeling for quantity was utterly lost and did not then exist in the Roman world; it was learnt only from tradition by Claudian and Servius as much as by Prudentius or us; but in reply to Conington's pertinent remark it might be said that the word is not used at all by Tibullus and Propertius nor in his lyrics and elegiacs by Catullus; that Ovid has only the form *conubia* in his elegiacs; that the word in the singular or dat. and abl. plur. occurring so often as it does in some writers, in Virgil 8, in Statius 18 times, is always found with the *u* in thesis, never once with it in arsis, and that though Lucan who resolves the *ii* of the gen. twice uses *conubii*, Virgil Aen. IV 167 chooses to say *conscius aether Conubiis*, not *Conubii*.—But I now have the conviction that here it is *conŭbia*: I have taken *mortalis* which would be equivalent to *conūbjum* or *conūbja*, and find that Lucr. has *mortális* 23, *mórtalís* 14 times; it is therefore beyond all reasonable probability that we never should find in any poet *conúbjum*; the more so that the final syll. might be elided, as Stat. Theb. x 62 *Expers conubii et.* But what follows completes I think the demonstration that it is *conŭbium*: here in Lucr. we have *Denique conubia ad*; Stat. silv. II 3 19 *Conubia ardenti*; III 3 110 *Conubia et fidos*; v 3 241 *Conubia unus amor*; Theb. I 245 *Conubia . hanc etiam*; III 579 *Conubia et primo*; VIII 235 *Conubia, et multa*; [Nemes. cyneg. 28 *Conubia et saevo violatum crimine patrem.*] Now that *conūbja* should have only these two positions in the v., never once one of the many more convenient ones, and that the *a* should always be elided, is more than improbable: take *naturā* or *aeternā* in Lucr. and see where they come in the v.: whereas *conŭbia* would naturally form the first foot, as above in Statius, and could seldom have any place but that or the 2nd foot, as here in Lucr.; and the *a* must be elided. *conubia* is used also by Ovid amores II 7 21 for *concubitus*. 778 *immor. mor. Inn. num.*; see n. to II. 1054. 779 *praeproperanter* another ἅπαξ λεγ. 780 *prim. pot.*: Fronto ad M. Caes. III 15 *huic primo ac potissimo*; Livy v 12 12 *primus ac potissimus*; XXVI 40 1 *primum ac potissimum omnium ratus*; VIII 29 2 and XXIII 28 1 *prior potiorque*; XXXVI 7 6 *prius potiusque est*; XXXIX 47 3 *nihil prius nec potius visum est.* 782 *volans adv.*: VI 742 and Aen. VI 191 *venere volantes.*

784—829: again everything has its proper place assigned to it; and thus the mind cannot be out of the body away from sinews and blood: if it could be in the head or heels or any other part of the body (and this would be much more natural than that it should be out of the body altogether) there it would still be within the man: now as mind and soul not only are in our body, but have a fixed place in that body, it is still more inconceivable that they could exist wholly out of it; therefore the soul dies with the body: nay thus to join a mortal thing with an immortal is too absurd: but if you say the soul is immortal, because it is sheltered from all that would destroy it, that is not true; not only does it suffer with the body, but it has other ailments of its own, fears for the future, remorse for the past, madness and lethargy. 784—797 recur v 128—141 with very slight differences. 784 *in aethere non* cet.: but *in aethere nubes, in aequore pisces, in arvis arbor*: comp. 622 623. 787 *ubi quicquit* = ubi quicque, as is shewn above. 790 *posset enim multo prius* i.e. in capite cet. esse, quam sine corpore oriri sola et a nervis longiter esse: on the parenthesis see n. to VI 1022: I have noted many like this in Cicero to Atticus; *atque hi* (*nolo enim te permoveri*); *ego adhuc* (*perveni enim* cet.); *omnino* (*soli enim sumus*); *quae quidem* (*ita enim* cet.); *cui tu* (*video enim* cet.): and in Livy, as *inde* (*recepti enim* cet.); *et* (*iam enim hiemps instabat*); *et* (*nam appetebat tempus*); *ipse* (*iam enim* cet.): *ceterum* (*quippe ea pignera* cet.), *ceterum* (*etenim* cet.): ad Att. IV 5 1 should run thus *quid? etiam* (*dudum enim circumrodo quod devorandum est*) *subturpicula mihi* cet. 793 *Tandem* is used here in not a common sense: comp. Plaut. miles 1062 *P. Minus ab nemine accipiet. M. heu ecastor nimis vilist tandem*; Ter. eun. 1055 *ut haeream in parte aliqua tandem apud Thaidem*; Phorm. 630 *Verum pono esse victum eum: at tandem tamen Non capitis ei res agitur, sed pecuniae.* [See Plaut. asin. 175 and Ussing there; and perhaps Cic. pro Rosc. com. 8 *quid, si tandem amplius triennium est?*] *in eodem homine* cet.: 554 *non quit sine corpore et ipso Esse homine, illius quasi quod vas esse videtur.* 794 *nostro quoque* cet.: not only is it in our body, but in that body it has its fixed place. 796 *infitiandum Posse*: *est* om. because *esse* is contained in *Posse*, according to Lachmann's rule explained at I 111. *infitiandum* is spelt with *t*: *c* is a gross error. 801 *mutua fungi* recurs IV 947: for *mutua* see n. to II 76, *fungi*

n. to I 441. Observe the poetical tautology with which in this passage after his usual fashion he enforces an important doctrine: *certum ac dispositumst, crescat et insit, sine corpore oriri Sola, in eodem homine atque in eodem vase, certum Dispositumque, esse et crescere, durare genique, diversius . . magis disiunctum discrepitansque, inmortali atque perenni.* 820 *ab rebus munita*: Sallust Cat. 32 1 *ab incendio intellegebat urbem vigiliis munitam*; Hor. od. III 16 1 *Danaen . . munierant satis Nocturnis ab adulteris*: Colum. XI 3 2 *hortum ab incursu hominum pecudumque munimus*; Livy XXII 1 3 *sese ab insidiis munierat*; [Caes. b. civ. II 9 5 *tecta atque munita est ab omni ictu hostium*; auct. b. Alex. 78 2 *provinciasque populi Romani a barbaris atque inimicis regibus... munivit.*] The sense admits of no question; but it may perhaps be a question whether the *vitalibus ab rebus* of mss. was not used by Lucr. in the sense of *letalibus* with contemptuous allusion to the use of *vitalia* as a euphemism for *mortualia*: Sen. epist. 99 22 *quam multis cum maxime funus locatur! quam multis vitalia emuntur!* and Petron. sat. 77 at end *interim, Stiche, profer vitalia in quibus volo me efferri*, and 42 *bene elatus est, vitali lecto, stragulis bonis.* 826 *male habet*: Ter. Andr. 436 *hoc male habet virum*; 940 *qui me male habet*; hecyr. 606 *haec res non minus me male habet quam te*; Tib. I 4 76 *Quos male habet multa callidus arte puer*; [Lucil. VII 20 *Hanc ubi vult male habere, ulcisci pro scelere eius.*] 827 'there is much force in *Praet. male adm.*, if you compare *futuris* in 825: not only present bodily suffering (824), but fear of future suffering (825); and when evil deeds are past and gone, remorse remains' J. E. M. *Praet. adm.* is the abl. abs. *male adm.*: V 1224 *Nequid ob admissum foede.* *remordent*: IV 1135 *conscius ipse animus se forte remordet*; Aen. I 261 *quando haec te cura remordet.*

830—869: thus the soul being proved to be mortal, death is nothing to us; for as we felt no discomfort, when Rome and Carthage were warring for the empire of the world, we shall feel none after the dissolution of body and soul, though heaven and earth go to ruin: if our soul even do exist after death, that is nothing to us, whose identity consists in the union of soul and body: or if infinite time to come collects again and gives life to the very same atoms of which we consist, that is nothing to us, when this identity has once been broken; even as we know and remember nothing of our former selves, if as is probable infinite time past arranged the atoms just as they now are in us: death will prevent us from existing in that future time and feeling the ills that may befall that repetition of ourselves: death then will at once make us for evermore as if we never had been. 830 foll. Epicurus to Menoeceus in Diog. Laert. X 125 says *τὸ φρικωδέστατον οὖν τῶν κακῶν ὁ θάνατος οὐθὲν πρὸς ἡμᾶς, ἐπειδήπερ ὅταν μὲν ἡμεῖς ὦμεν, ὁ θάνατος οὐ πάρεστιν, ὅταν δ' ὁ θάνατος παρῇ, τόθ' ἡμεῖς οὐκ ἐσμέν.* Both Lactantius and Bayle

assail Epic. and Lucr. with the 'Mors misera non est: aditus ad mortemst miser'; but neither meets them on their own ground. 830 *Nil est ad nos*: 845 *Nil tamen est ad nos*; 926 *Multo igitur mortem minus ad nos esse putandum est*; 972 *Respice item quam nil ad nos anteacta vetustas . . fuerit*: Lucr. is prob. translating Epicurus' *οὐδὲν πρὸς ἡμᾶς.* Plin. epist. VII 17 12 *recte an secus, nihil ad me*; paneg. 31 *nihil hoc ad urbem ac ne ad Aegyptum quidem*; Ov. trist. II 472 *Hoc est ad nostros non leve crimen avos*; Cic. de fin. I 39 *nihil ad Epicurum*: Madvig cites there de div. II 78, and other instances. [Comp. also Cic. in Pis. 68 *rectene an secus, nihil ad nos, aut, si ad nos, nihil ad hoc tempus.* For a number of exx. in Cicero see Nizol. p. 19 col. 1.] 831 *habetur* here = intellegitur, not simply *existimatur*: comp. I 758 *quid a vero iam distet habebis*, and n. there. 833 comp. culex 33 *Graecia cum timuit venientes undique Persas*; Juv. XI 113 *Litore ab oceano Gallis venientibus*: *venio* is continually used by Livy for the hostile advance of soldiers: see Arnob. VII 50 at beg. 835 *Horrida* cet.: Lucr. seems to have been thinking of Ennius ann. 311 *Africa terribili tremit horrida terra tumultu*; and Spenser faerie qu. I 11 7 to have been thinking of Lucr. *That with their horror heven and earth did ring*: Catullus too, quoted in n. to 57, imitates Lucr.: Virg. catal. 12 3 *Terrarum hic bello magnum concusserat orbem.* 836 *In dubioque* cet. i.e. omnes humani in dubio fuere utr. ad reg. sibi cadendum cet.: Lucr. is very fond of such inversions; see n. to I 15: *humanis*, as 80 *Percipit humanos odium*, where see note. *ad regna cad.*: Livy I 40 3 *praeceps inde porro ad servitia caderet*; Publil. Syrus 101 *Cito improborum laeta ad perniciem cadunt*: with these vss. comp. Livy XXIX 17 6 *in discrimine est nunc humanum omne genus, utrum vos an Carthaginienses principes terrarum videat*: was Livy thinking of Lucr. or do both of them refer to Ennius perhaps or Naevius? 839 *uniter apti* recurs 846; and the phrase is found thrice in V, *uniter* being apparently used by Lucretius alone; as well as *longiter*: the words are opposed to *discidium*, and express that organic union of body and soul which gives a man his individuality and personal identity. 842 *Non si terra* cet. a proverbial expression: see n. to I 2 3 and 6—9: Juv. II 25 *Quis caelum terris non misceat et mare caelo*; Livy IV 3 6 *quid tandem est cur caelum ac terras misceant?*: comp. what Cicero de fin. III 64 calls *illa vox inhumana et scelerata*, adopted by Tiberius and Nero, *Ἐμοῦ θανόντος γαῖα μιχθήτω πυρί· Οὐδὲν μέλει μοι, τἀμὰ γὰρ καλῶς ἔχει.* Sextus pyrrh. hyp. III 229 is an excellent comment on the above vss. *καὶ ὁ Ἐπίκουρος δέ φησιν 'ὁ θάνατος οὐδὲν πρὸς ἡμᾶς· τὸ γὰρ διαλυθὲν ἀναισθητεῖ, τὸ δὲ ἀναισθητοῦν οὐδὲν πρὸς ἡμᾶς'· φασὶ δὲ καὶ ὡς εἴπερ συνεστήκαμεν ἐκ ψυχῆς καὶ σώματος, ὁ δὲ θάνατος διάλυσίς ἐστι ψυχῆς καὶ σώματος, ὅτε μὲν ἡμεῖς ἐσμέν, οὐκ ἔστιν ὁ θάνατος, οὐ γὰρ διαλυόμεθα, ὅτε δὲ ὁ θάνατος ἔστιν, οὐκ ἐσμὲν ἡμεῖς· τῷ γὰρ μηκέτι τὴν σύστασιν εἶναι τῆς ψυχῆς καὶ τοῦ σώματος οὐδὲ*

ἡμεῖς ἐσμέν. Cic. Tusc. disp. I 90 *nec pluris nunc facere M. Camillum hoc civile bellum quam ego illo vivo fuerim Romam captam.*

843 *si iam*: see n. to I 968: the assumption is of course false. *si iam nostro sentit* cet.: similarly involved in construction are I 566 *possit tamen omnia reddi Mollia quae fiunt...Quo pacto fiant* cet.; 632 *Non possunt ea quae debet genitalis habere Materies*; 648 *si partes ignis eandem Naturam quam totus habet super ignis haberent*; II 1133 *quanto est res amplior, augmine adempto, Et quo latior est, in cunctas* cet.; VI 158 *Ventus enim cum confercit franguntur in artum Concreti montes* cet. and 176 *Fecit ut ante cavam docui spissescere nubem*: also III 261 *Sed tamen ut potero summatim attingere tangam*; IV 1119 *Nec reperire malum id possunt quae machina vincat*; 193 *primum quod parvola causa Est procul a tergo quae provehat atque propellat*: Ovid is often very licentious on this head: comp. ars I 339; amor. III 5 13 14, and 18; ibis 3; ex Ponto I 1 80; 5 79; her. 10 110. [Comp. also Plaut. Amph. arg. I 7 *Blepharo captus arbiter, Uter sit non quit Amphitruo decernere*; ib. v. 84; Catull. 66 40 *adiuro teque tuumque caput, Digna ferat, quod si quis inaniter adiurarit*; Lucan IX 568 (corr. by Madvig adv. II p. 133) *An sit vita brevis nil longane differat aetas?*; Calpurn. IX 60 *Munera namque dedi...Vocalem longos quae ducit aedona cantus.*] Lucr. might have written here *Et si iam sentit, nostro* cet., but we feel the present order to be more impressive: very similar is V 177 *Natus enim debet quicumque est velle manere In vita*, where he might have written *Debet enim, natus quicumque est, velle* cet.; Virg. ecl. II 12 *At mecum raucis tua dum vestigia lustro Sole sub ardenti resonant arbusta cicadis*, where, as I have learnt from Dr B. H. Kennedy, *mecum* belongs to the clause *tua dum* cet.: Virgil too might have said *At raucis, mecum* cet.: see also n. to II 250 *Declinare—sese.* 845 *comptu*: see n. to I 950 *compta.* 847 foll. *Nec si materiem* cet. refers probably to some theory like this in St Austin civ. dei XXII 28 *mirabilius autem quiddam Marcus Varro ponit in libris quos conscripsit de gente populi Romani, cuius putavi verba ipsa ponenda: 'genethliaci quidam scripserunt' inquit 'esse in renascendis hominibus quam appellant* παλιγγενεσίαν *Graeci: hac scripserunt confici in annis numero quadringentis quadraginta, ut idem corpus et eadem anima, quae fuerint coniuncta in homine aliquando, eadem rursus redeant in coniunctionem'.* 848 comp. 857. 850 foll. 'Cic. Tusc. I 91; Prodicus ap. Plat. Axioch. 369 B' J. E. M. 851 *repetentia*, another word common only to him and his constant imitator Arnobius who twice uses it, II 26 *oblitam* (animam) *quod paulo ante sciebat ex oppositu corporis amittere repetentiam priorum*, and 28 *quod enim rebus ingressis priorum repetentiam detrahit, et intra se gesta inrecordabili debet obliteratione deperdere*: it is then almost certain that Arnobius found *repetentia* in Lucr. and he seems to be referring both to this v. and 675; Lachmann's

objections are wire-drawn; *repetentia nostri*, the recollection of ourselves, naturally enough indicates that continued consciousness of our personal identity which is broken only by death; so long as we live, *memori quimus nos repraehendere mente*; when dead, *non quimus: repetentiam nostri amittimus.* 852 *Et nunc*: 'and so too now': Plaut. curc. 493 *Et nunc idem dico*; Poen. I 1 14 *Et nunc ego amore pereo*; Caes. bel. Gall. VI 13 12 *et nunc, qui diligentius eam rem cognoscere volunt, plerumque illo discendi causa proficiscuntur.* 853 *de illis* i.e. nobis. 854 *cum respicias*: see n. to II 41 *cum videas.* 856 *possis*: see n. to I 327. 859 *repraehendere*=repetere: Wak. compares Cic. Verr. III 51 *quod erat imprudentia praetermissum, id quaestu ac tempore admonitus reprehendisti.* 860 *vitai pausa* recurs 930. *vageque* cet.: 923 *nostros tunc illa per artus Longe a sensiferis primordia motibus errant*: here then *Deerrarunt passim motus* cet. because *deerrarunt primordia, Sensifer unde oritur primum per viscera motus*, as he says 272. 862 *misere aegreque*; as *male est, bene est*: Catull. 38 2 *Malest mehercule et est laboriose*; Lucil. X 2 Muell. *firmiter essent*; and comp. 863 *male .. Accidere.* 862 foll. comp. Sen. epist. 36 9 foll. 864 *probet*: see n. to I 977 *probeat.* 866 *timendum* without *est*, because of *esse* according to Lachmann's rule: see n. to I 111: see also III 796 *infitiandum posse.* 868 *Differre anne*: *anne* recurs IV 781: *diff. anne* seems like *dubito, nescio an*, implying a double clause 'fueritne an non'. 869 *Mortalem* cet.: Amphis in Athen. VIII p. 336 C θνητὸς ὁ βίος...Ὁ θάνατος δ' ἀθάνατός ἐστιν, ἂν ἅπαξ τις ἀποθάνῃ.

870—893: when a man laments that after death he will rot or be the prey of beasts, be sure there is something wrong with him: he does not separate his dead carcase from his present self; and cannot see that after death there will be no other self to stand by and mourn the self thus mangled, or else burnt on the pyre; for if it is an evil after death to be torn by wild beasts, it is surely as much one to burn in flames or the like. 870 *ubi videas*: see n. to II 41. *se...indignarier*: I know no other instance of an acc. of the person in this sense; an acc. of the thing is common enough: comp. Aen. II 93 *casum insontis mecum indignabar amici* with V 350 *casus miserari insontis amici*; so that *miserari*=*indignari*; and Lamb. would read here *miserarier*: 884 *indignatur se mortalem esse creatum*; 1045 *Tu vero dubitabis et indignabere obire*; Sulpicius ap. Cic. ad fam. IV 5 4 *hem nos homunculi indignamur si quis nostrum interiit.* 871 *cor. posto*: see n. to 892. 872 *interfiat*; as *effio, confio*: see n. to II 1004. 873 *non sinc. sonere*, a favourite metaphor with Greeks and Latins from Plato downwards: Theaet. p. 179 D διακρούοντα εἴτε ὑγιὲς εἴτε σαθρὸν φθέγγεται. *sonere*, as 156: Enn. trag. 106 *neque irati neque blandi quicquam sincere sonunt*: see n. to 156. *sub. stim.*: IV 1082 *Et stimuli subsunt.* 876 *dat* cet. i.e. dat id quod promittit se daturum, et id ex quo promittit se daturum: *unde datum*

is a regular phrase: see Hor. sat. II 2 31 and Bentl. there, who cites Ovid and Persius. **877** *eicit*: IV 1272 *Eicit enim*; Virg. ecl. III 96 *reice capellas*; [Hor. sat. I 6 139 *Deicere de saxo*;] Stat. Theb. IV 574 *reicitque*; Sen. Phoen. 426 *proiciet*: Seneca often has *ădice*, *ŏbici*, *ŏbicit* or *sŭbicit*. **878** *esse...super* i.e. superesse. **880** *in morte*, after death: Sen. epist. 30 5 and 8 uses *in ipsa morte* for the moment of dying, but 9 *in morte* means 'after death' as in Lucr. **881** *miseret* personal: Ennius has *miserete* and *misererent*; Virgil uses *miseresco*. *illim*, the same as *illinc*: Cicero uses both *illim* and *istim*: on these and cognate forms see Ritschl opusc. II p. 452—459. *dividit illim* i.e. ab illo se: it seems simpler not to join it with *removet* and so make *a proiecto corpore* an epexegesis of it, as Lach. does; though that would perhaps resemble Virg. ecl. I 54 *Hinc...vicino ab limite*.

883 *contaminat* has here the neutral sense that the subst. *contagia* has in 345 *corporis atque animai Mutua contagia*, and 740 *consensus contagia*. **885** *alium se*: Quintil. XII 11 2 *carendum est...ne se quaerat priorem*. **888** *Nam* cet. with reference to *lacerari urire*, because it was vulgarly thought that to be mangled by beasts was a misfortune, to be burnt on a funeral pile a blessing: Petron. sat. 115 *ferae tamen corpus lacerabunt. tamquam melius ignis accipiat; immo hanc poenam gravissimam credimus, ubi servis irascimur*: comp. also Sen. epist. 92 34. **889** *Tractari*; an unusual meaning: in Ennius and others it has the sense of to drag: see Forc. **890** *torrescere* appears to be a ἅπαξ λεγόμ. **891 892** denote one mode of burial, that of embalming and laying in a sarcophagus: though in the time of Lucr. burning on a pile and gathering the ashes in an urn was the common method, the other was also practised; the numerous sarcophagi of all ages are sufficient proof of this. **891** *in melle*: it appears from many passages that honey was a principal means of preserving a dead body: see Xenophon Varro Josephus in Lamb. and Hav. [Alexander's body was so preserved: Stat. silv. III 2 117 (Friedlaender Sittengesch. II p. 175)]. **892** *sum. gel. aeq. saxi* prob. denotes the bottom of the sarcophagus on which the embalmed body was laid out: 871 *corpore posto*: but bodies were sometimes stretched on the bare rock out of which the tomb was hewn, as proved by many ancient tombs that have been opened: or it may refer to a stone bed, like the *lecti mortuarii* of the Etruscans: see corp. inscr. I 1313 for a curious inscription found in a sepulchral chamber at Falerii, in which they are assigned to various people, these *lecti* being hewn out of the rocky walls. [Comp. Mart. VIII 44 13 *Supraque pluteum te iacente vel saxum, Fartus papyro dum tibi torus crescit.*] *aequore*: IV 107 *speculorum ex aequore*. **893** common burying in the earth: [Ov. met. IV 243 *enectum pondere terrae...caput*:] Virg. geor. II 351 *Qui saxo super atque ingentis pondere testae Urgerent*, imitates this v. of Lucr. with quite another sense.

894—911: they say, you will see no more wife home and children; but they do not add, you care not now for these; else they would not thus grieve for you: another adds, you sleep the sleep of death, freed for ever from all ills; but we remain to mourn evermore: you might ask this man, if the dead only sleeps, why mourn for him evermore? **894** *Iam iam*: Cic. Verr. I 77 *iam iam, Dolabella, neque me tui neque tuorum liberum...misereri potest*; Catull. 63 73 *Iam iam dolet quod egi, iam iamque paenitet*; 64 143 *Iam iam nulla viro iuranti femina credat*; Aen. IV 371 *iam iam nec maxima Iuno Nec Saturnius haec oculis pater aspicit aequis*; [II 701 *Iam iam nulla mora est*:] so in Ovid *iam numquam videndus, loca iam non adeunda*, and the like=non amplius cet. *neque ux. opt.*: it is not certain that these words go with what follows: the older editors seem to join them with what precedes, though their stopping is ambiguous. **895** *nec dulces* cet.: Virg. geor. II 523 *dulces pendent circum oscula nati, Casta pudicitiam servat domus*; Gray elegy 21 *For them no more the blazing hearth shall burn Or busy housewife ply her evening care, No children run to lisp their sire's return Or climb his knees the envied kiss to share*: Virgil and Gray I fancy joined the *uxor* with the *domus*. [*occurr. praeripere*: Plaut. Bacch. 631 *Militis parasitus huc modo aurum petere hinc venerat*; Cas. III 5 68 *Ego huc missa sum ludere*; asin. 901 *ecquis currit pollictorem arcessere?*; Pseud. 645 *Reddere hoc, non perdere, erus me misit*; Ter. Ph. 102 *Voltisne eamus visere?*; hec. 188 *nostra ilico It visere ad eam*; ib. 345 *filius tuus intro iit videre*; eun. 528 *misit porro orare ut venirem*; Virg. Aen. I 527 *Nec nos aut ferro Libycos populare penatis Venimus aut raptas ad litora vertere praedas*; Hor. od. I 2 7 *Omne cum Proteus pecus egit altos visere montes*; ib. III 21 7 *Descende.. Promere languidiora vina*; Ov. her. I 37 *te quaerere misso.. nato*; Prop. I 1 12 *Ibat et hirsutas ille videre feras*; I 6 33 *Seu pedibus terras seu pontum carpere remis Ibis*; I 20 23 *At comes invicti iuvenis processerat ultra, Raram sepositi quaerere fontis aquam*; III (II) 8 (16) 17 *mittit me quaerere gemmas*; IV (III) 1 3 *Primus ego ingredior...ferre*; V (IV) 1 71 *Quo ruis imprudens, vage, dicere fata, Properti?*; Wilmanns' exemp. inscr. Lat. 2566 *vade in Apolinis lavari.*] **896** *tacita* cet.: Virgil was thinking of Lucr. as well as Homer when he wrote Aen. I 502 *Latonae tacitum pertemptant gaudia pectus*. **897** *factis flor.*: Plaut. miles 56 *te unum in terra vivere Virtute et forma et factis invictissumis*. **898** *misero misere*, κακῷ κακῶς: Cic. ad Att. III 23 5 *quem ego miserum misere perdidi*: Plautus revels in this and like expressions; see Naeke Rhein. mus. III p. 329, *misere miseri, scite scitus, bella belle, doctum docte, inique iniqui, mala malae male, bonus bonis bene feceris, cupida cupiens cupienter cupit*: comp. the *Poorly poor man he lived, poorly poor man he died* of Spenser: 1015 *Est insignibus insignis*. *omnia* cet.: Mommsen inscr. regni Neapol. 3133 *Apstulit haec unus tot tantaque munera nobis*

Perfidus infelix horrificusque dies. 900 *Illud* cet. shews indirectly who the speakers are, as in 909. 901 *super* = insuper: see n. to I 649. *desiderium* cet.: 918 *Aut aliae cuius desiderium insideat rei.* 904 *Tu quidem ut*: a rare form of elision in hexameter verse: see Luc. Mueller de re metr. p. 290: but found also VI 80 *Quam quidem ut*: comp. III 339 *Non enim ut*; VI 485 *Innumerabilem enim*; V 589 *Alteram utram*; IV 616 *Plusculum habent*; 618 *spongiam aquai*; I 1012 *alterum eorum*: it occurs occasionally in Virgil Horace and Ovid.—Orell. inscr. 1192 SOMNO. AETERNAL. C. MATRINI VALENTI. PHILOSOPHI EPICUR...MATRINIA CONIUGI INFELICISSIM. 905 *Duncan's in his grave: After life's fitful fever he sleeps well*: faerie queene I 9 40 *He there does now enjoy eternall rest And happy ease which thou dost want and crave.* 906 *cinefactum*: Lach. assails Nonius for explaining it 'in cinerem dissolutum': after the analogy he says of *tumefacere rubefacere* and the like it must be connected with a supposed neut. verb *cinēre*: *prope* must be joined with it: so *prope cinef.* means 'qui iam prope cineris colorem et adspectum nanctus est'. He thus in his short enigmatical way implies that *bustum* here is not the pyre, but the tomb in which the body was laid entire and gradually assumed from time the hue of ashes. *horrifico busto* I have no doubt means the funeral-pile: Aen. XI 200 *Ardentis spectant socios semustaque servant Busta neque avelli possunt*; Paulus Festi p. 32 '*bustum* proprie dicitur locus in quo mortuus est combustus et sepultus': and if *cinefactum* cannot have the meaning given to it by Nonius, it must imply that the friends looked on and wept while the body was caught by the flames and gradually changed its natural colour for that given to it by the scorching of the fire. This is perhaps more poetical than the meaning assigned to it by Nonius, though it is bold in such a case to speak dogmatically like Lach.; but it spoils the fine passage to join, as he does, *prope* with *cinef.*: with the use of *prope* here comp. VI 403 *prope ut hinc teli determinet ictus.* 907 *Ins. defl.*: Hor. epist. I 14 7 *dolentis Insolabiliter.* 908 *maerorem* seems rather to have the force of *dolorem*: Cic. ad Att. XII 28 3 *maerorem minui: dolorem nec potui nec, si possem, vellem.* 909 *Illud ab hoc*: here, as 900, with poetical indirectness he tells who is the speaker of 904—908: probably the son or nearest relation is singled out. 911 *Cur quisquam aeterno* cet. with reference to 907 *aeternumque Nulla dies* cet.

912—930: men say glass in hand 'enjoy the moment, it cannot be recalled'; as if after death one felt the want of wine or aught else: in sleep we have no thought for life; how much less then in death if there can be a less than nothing! for death is a more complete dispersion of our matter, a sleep that knows no waking. 912 foll. Martha p. 159 foll. well contrasts the sternness of Lucretian with the frivolity of Horatian epicureanism: the 'carpe diem' and the like.

912 *tenentque*: I 495 *manu retinentes pocula rite.* 913 *saepe* = ut saepe fit: see n. to V 1231. *ora* is very vaguely used by the poets; here it must mean the brows: Aen. VI 772 *umbrata gerunt civili tempora quercu*: for it would be far-fetched to suppose that the crown on the head shaded the face. 914 *Ex an. ut dic.*: IV 1195 *facit ex animo saepe*; Ter. eun. 175 *Utinam istuc verbum ex animo ac vere diceres*; 179 *Ego non ex animo misera dico*; Sen. epist. 78 19 *risit et quidem ex animo*; Catull. 109 4 *id sincere dicat et ex animo.* *brevis* cet.: Amphis in Athen. VIII 336 C Πῖνε παῖζε· θνητὸς ὁ βίος, ὀλίγος οὑπὶ γῆς χρόνος: copa 37 *Pone merum et talos; pereat qui crastina curat! Mors aurem vellens 'vivite' ait 'venio'.* 915 *fuerit* has its well-known force: *Sive erimus seu nos fata fuisse velint*: found already in Plaut. capt. 516 *me fuisse quam esse nimio mavelim.* 917 *torres*: Lach. quotes from the glossar. Cyrilli ἀπόκαυμα *ustilacio torres*; and for the form compares *labes tabes pubes* cet. 918 *aliae*: this gen. is found even in Cic. de div. II 30 *aliae pecudis iecur nitidum atque plenum est, aliae horridum atque exile*: *rei* monosyll. as IV 885 *illius rei constat imago*: see n. to I 688. [In Livy XXIV 27 8 all mss. have *aliae partis*: but see Madvig.] Plaut. miles 802 has the dat. *Qui nisi adulterio studiosus rei nulli aliaest inprobus*, where Ritschl quotes Paulus Fest. p. 27 '*aliae rei* dixit Plautus pro eo quod est *alii rei*': *alterae*, gen. and dat., occurs in Terence. 921 922 he accumulates words to express how utterly indifferent it must be to us. 923 924 see n. to 860 *vageque* cet. 925 *correptus* cet.: 163 *Corripere ex somno corpus.* 928 *disiectus* seems to be a ἅπαξ λεγόμ. 929 *Consequitur*: auctor ad Heren. II 27 *consequi videtur, ut doceamus*; Cic. de orat. III 6 *sudoremque multum consecutum esse audiebamus*; ad Q. fratr. II 6 5 *in eam tabulam magni risus consequebantur*; de fin. IV 29 *obscuratio consequitur*: 'idem est fere atque *accidit* sive *fit*' Madvig. *leto* abl. = in leto, in morte: corp. inscr. I 1009 l. 17 *leto tacent*; Aen. VIII 566 *leto sternendus erat*; IX 433 *Volvitur Euryalus leto.* *expergitus* occurs twice in Fronto. 930 comp. Cic. Tusc. I 92 *habes somnum imaginem mortis eamque cotidie induis, et dubitas quin sensus in morte nullus sit, cum in eius simulacro videas esse nullum sensum?* *quem semel est secuta*: Ov. met. II 611 *Corpus inane animae frigus letale secutum est*; Colum. VII 4 2 *clades sequitur gregem*: 'saepius res sequi aut consequi aliquem dicitur, ubi recentiores aut absolute sequi eam dicerent aut aliquem in eam incidere' Madv. de fin. I 32: he cites Tusc. II 28 *quis igitur Epicurum sequitur dolor*; Sall. orat. Philippi 9 *malos praemia sequuntur.*

931—977: if nature were to say to you or me 'why lament your death? if your life has been a pleasant one, why not go to rest satisfied with the feast? if the contrary, why not end your troubles? for I have nothing new to give you, if you were to live for ever': we must allow her words to be true: if an old man were to bemoan himself, would she

not with justice thus chide? 'a truce with tears; the fault is your own, if you have not had enjoyment': make way for others: they too will follow you, as you now follow those before you; life is but a limited tenure: what took place before our birth is nothing to us; judge from this of what the future will be after our death. **932** *hoc alicui...increpet*: a common constr. in Livy: I 51 1; VI 37 1; IX 24 10; X 35 11; XXVII 1 9: ['*increpitare alicui aliquid* Properz u. Val. Max.' Draeger hist. synt. I p. 384: see Propert. IV (III) 25 14 *speculo rugas increpitante tibi*.] **933** *Quid tibi tanto operest* seems to mean *quid tibi est tam magni momenti*. **935** *Nam gratis* cet., 938 *Cur non*: it can hardly be said that *si* is omitted here: it is one of those sentences common in the best writers, where the first clause is asserted as a supposition: 'you have passed, let us say, a happy life; well then etc.': Cic. ad Att. XIV 13 4 *proficiscor, ut constitueram, legatus in Graeciam*: *caedis impendentis periculum nonnihil vitare videor* cet.; *sin autem mansero* cet.; where, as in Lucr., the meaning is made clear by the *sin* of the 2nd part: Hor. epist. I 1 33—37; ib. 87—89, with *si non* in 2nd clause; Ov. ars II 225—230; Sen. Agam. 262 263; Quintil. I 2 11; Juv. XVI 17—22. **935** *gratis*: its opposite *ingratis* is used by Lucr. four times: Plautus and Terence have the full forms *gratiis* and *ingratiis*, but Cicero uses *gratis* and *ingratis*: they mean with the will and against the will respectively. **936** *pertusum* cet.: 1009 *laticem pertusum congerere in vas*: the allusion here therefore must be to the Danaids: Plaut. Pseud. 369 *In pertusum ingerimus dicta dolium; operam ludimus*: Marullus says in marg. cod. Victor. 'λαμπρά'. **937** *ingrata* is opposed to 935 *gratis*. **938** *plenus* cet.: comp. 960 *Quam satur* cet. and Hor. sat. I 1 118 *exacto contentus tempore, vita Cedat uti conviva satur*: then 121 *verbum non amplius addam*; and Lucr. 941 *cur amplius addere quaeris*: Sen. epist. 98 15 *ipse vitae plenus est, cui adici nihil desiderat sua causa*; Stat. silv. II 2 128 *abire paratum Ac plenum vita*: Orellius l. l. quotes from Stobaeus ὥσπερ ἐκ συμποσίου ἀπαλλάττομαι οὐδὲν δυσχεραίνων, οὕτω καὶ ἐκ τοῦ βίου, ὅταν ἡ ὥρα ᾖ. Comp. too 969 *quam tu cecidere cadentque* with Hor. ars 70 *quae iam cecidere cadentque*: 971 perhaps with epist. II 2 159: see n. there: 996 *Qui petere a populo fasces saevasque secures Imbibit et semper victus tristisque recedit* with epist. I 16 33 *ut si Detulerit fasces indigno detrahit idem. 'Pone, meum est' inquit: pono tristisque recedo*: 1028 *magnis qui gentibus imperitarunt* with sat. I 6 4 *qui magnis legionibus imperitarent*, as Lucr. V 1227 has *Induperatorem... Cum validis legionibus*: 1063 *Currit agens mannos ad villam*, 1066 *Aut abit in somnum gravis atque oblivia quaerit*, 1068 *Hoc se quisque modo fugit (at quem scilicet, ut fit, effugere haut potis est, ingratis haeret)* with epist. I 7 77 *Impositus mannis*, sat. II 6 60 *O rus, quando ego te aspiciam ...nunc somno et inertibus horis Ducere sollicitae iucunda oblivia vitae*, 7 112 *Non horam tecum esse potes, non otia recte Ponere, teque ipsum vitas*

fugitivus et erro...iam somno fallere curas: Frustra, nam comes atra premit sequiturque fugacem, od. II 16 19 *patriae quis exul Se quoque fugit?*; epist. I 14 13 *In culpa est animus qui se non effugit umquam.*

939 *capis securam* cet.: Ov. fasti VI 331 *placidamque capit secura quietem*: comp. with what precedes Sen. de benef. III 4 *hoc loco reddendum est Epicuro testimonium qui adsidue queritur quod adversus praeterita simus ingrati, quod quaecumque percepimus bona non reducamus nec inter voluptates numeremus, cum certior nulla sit voluptas quam quae iam eripi non potest.* **941** *in offensust*: *offensa* in Cicero; as ad Att. IX 2 a 2 *negas te dubitare quin magna in offensa sim apud Pompeium*: so *in invidia, in honore, in amore esse*: IV 1156 *Esse in deliciis summoque in honore vigere.* **943** (cur) *Non* cet. *finem facis*: 1093 *qui finem vitai fecit*: the phrase is very common. **945** *eadem sunt omnia semper*, **947** *eadem tamen omnia restant*: so says the preacher I 9 *the thing that hath been is that which shall be, and that which is done is that which shall be done; and there is no new thing under the sun.* **948** *si pergas*, **949** *si numquam sis moriturus*: I doubt whether I have done right in reading *pergas* for *perges* of mss. in deference to Lamb. and Lach.: here the decisive future, followed by the more hesitating potential *sis moriturus* in a case which must ever continue doubtful, appears to suit the context: Juv. I 159 Jahn reads with P *vehatur Pensilibus plumis atque illinc despiciet nos*: Mayor *despiciat*. **948** *Omnia* cet.: 1090 *licet quot vis vivendo vincere saecla*; I 202 *Multaque vivendo vitalia vincere saecla*, where see n. **950** *Quid resp.*: for the indic. comp. Madv. opusc. II p. 39 who among many other passages cites Cic. ad Att. XVI 7 4 *nunc quid respondemus?*; comp. too VI 1106 *Nam quid .. putamus*, and n. there. *intendere litem* is a legal phrase; the *intentio* being the plaintiff's claim for damages: Gaius IV 41 *intentio est ea pars formulae qua actor desiderium suum concludit...si paret, N. N....dare oportere* cet. But probably it here means no more than to bring an accusation against: auctor ad Heren. I 27 *ex intentione et infitiatione iudicatio constituitur hoc modo: intentio occidisti Aiacem* cet.; II 28 *ratio est quae causam demonstrat veram esse quam intendimus*; 45 *intendere controversiam*; Cic. de orat. I 42; pro Caecina 20. **955** *abhinc* of the future, a very rare sense: Lach. and before him Forc. cite Pacuvius 21 *seque ad ludos iam inde abhinc exerceant.* **956** *perfunctus v. praemia*: so the antiquarian Fronto, ad Verum II 7, *onera quaestoria et aedilicia et praetoria perfunctus est*; 734 *mala multa...fungitur*; V 358 *neque...fungitur hilum*; III 940 *ea quae fructus cumque es*; IV 1078 *quid primum... fruantur*; 1095 *Nil datur...fruendum*; II 659 *potitur primordia*; III 1038 *Sceptra potitus*; IV 760 *quem...mors et terra potitast*; V 1033 *vim quisque suam quoad possit abuti.* **957** Bentl. quotes Democr. frag. 31 Mullach ἀνοήμονες τῶν ἀπεόντων ὀρέγονται, τὰ δὲ παρέοντα...ἀμαλδύ-

νουσι: comp. too Eur. Hipp. 183 Οὐδέ σ' ἀρέσκει τὸ παρὸν τὸ δ' ἀπὸν φίλτερον ἡγῇ: and inscr. Lat. I 1453 *Quod fugis, quod iactas, tibei quod datur: spernere noli*: see n. to IV 885. [**960** comp. Stat. Silv. II 2 128 *abire paratum Ac plenum vita.*] **962** *magnus*: Sen. epist. 110 *disce parvo esse contentus et illam vocem magnus atque animosus exclama*; [Mart. VII 44 5 *magnus comes exulis isti.*] *concede*: Ter. hec. 597 *Hic video me esse invisam inmerito: tempus est concedere.* **963** *incilet*, an old word found in Accius Pacuvius and Lucilius. **966** *Nec quisquam* cet. but his matter is used for the growth of other things. **969** *ante haec*: these very things which now flourish by your decay, have in other combinations fallen themselves as you now fall, and in future combinations will fall again. **971** every one has the *usus*, and not only the *usus*, but the *usus et fructus*; for *usu* is doubtless put with poetical brevity for *usu fructu*: *ususfructus*, says the digest, *est ius alienis rebus utendi fruendi, salva rerum substantia*: the *usus* was much more limited; the *fructus* includes the *usus*, not the *usus* the *fructus*. Curius says to Cicero, ad fam. VII 29 1, *sum enim* χρήσει μὲν *tuus*, κτήσει δὲ *Attici nostri; ergo fructus est tuus, mancipium illius*; and Cicero replies in 30 2 *cuius* (Attici) *quoniam proprium te esse scribis mancipio et nexo, meum autem usu et fructu, contentus isto sum. id est enim cuiusque proprium, quo quisque fruitur atque utitur*; Livy XLV 13 15 *Masinissam . . usu regni contentum scire dominium et ius eorum qui dederint esse.* But nature gives to none the *mancipium ex iure Quiritium*, the full and ábsolute ownership of life; life is only lent; its usufruct as the digest says is only *ius alienis rebus utendi fruendi*; man is never *dominus*; nature keeps the *dominium* to herself: *Quaedam, si credis consultis, mancipat usus*, says Horace, but not life; no *usucapio* is in force here: οὔτι γὰρ κεκτήμεθα Ἡμέτερον αὐτὸ πλὴν ἐνοικῆσαι βίον, says Euripides, or Moschion, of the body. [So too Lucil. XXVII 6 *Cum sciam nil esse in vita proprium mortali datum, Iam, qua tempestate vivo, chresin ad me recipio*; Arnob. II 27 *usu et illis est vita, non mancipio tradita. manc.* and *usu* I take to be ablatives: so Roby gramm. pt. II p. XLVIII.] **973** *quam nascimur ante*: IV 884 *quam mens providit quid velit ante*; VI 979 *quam...prius*: III 358 I now read *quam expellitur ante*: comp. Tib. I 3 9; IV 7 8 *quam meus ante*; Mart. IX 35 6 *quam venit ante.* **976** *horribile*: Pascal found it so: 'quand je considère la petite durée de ma vie, absorbée dans l'éternité précédant et suivant, . . je m'effraie'. **977** Seneca must have been thinking of Lucr. 830—977 when he penned epist. 54 4 *mors est non esse. id quale sit iam scio. hoc erit post me quod ante me fuit. si quid in hac re tormenti est, necesse est et fuisse ante quam prodiremus in lucem: atqui nullam sensimus tunc vexationem*: (comp. 832 *anteacto nil tempore sensimus aegri*) . . *utrimque vero alta securitas* cet.: (comp. 977 *non* omni somno securius *exstat*). Arist. eth. Nicom. III 9 with truer instinct,

φοβερώτατον δ' ὁ θάνατος· πέρας γάρ, καὶ οὐδὲν ἔτι τῷ τεθνεῶτι δοκεῖ οὔτ' ἀγαθὸν οὔτε κακὸν εἶναι.

978—1023: the stories told of hell are really true of this life: Tantalus, Tityos, Sisyphus, the daughters of Danaus, are but types of people tormented here by various lusts and passions: Tartarus too, Cerberus and the furies have no existence; but are pictures of the various punishments of crime in this world; and even if these are escaped, the tortures of conscience make a hell of earth. **980** foll. this punishment is assigned to him by many, as Pindar Cicero and Eurip. Orest. 5, a passage Lucr. may have had before him, Τάνταλος Κορυφῆς ὑπερτέλλοντα δειμαίνων πέτρον Ἀέρι ποτᾶται: see Porson's long note, and Pausanias there cited, who describes a picture of Polygnotus and says the latter got the impending stone from Archilochus: comp. too Welcker, Rhein. Mus. X p. 242—254: he comments on Alcman's fragment about Tantalus: Ribbeck prol. Verg. p. 62; and a learned article by Dom. Comparetti in Philolog. XXXII p. 226—251, on Pindar's account. **981** *cassa form.* recurs 1049. **983** *casum*: there is an evident play on the literal and figurative meaning of this word: comp. with the above Cic. de fin. I 60 *accedit etiam mors quae, quasi saxum Tantalo, semper impendet, tum superstitio qua qui est imbutus, quietus esse numquam potest*: he may well have been thinking of Lucr. here, as in Tusc. IV 35 he draws a different moral from some tragic poet. **986** *Perpet. aetatem*: VI 236 *Quod solis vapor aetatem non posse videtur Efficere.* **989** *Optineat*: Livy V 37 5 *immensum obtinentes loci*; XXXV 27 15 *obtinebant autem longo agmine... prope quinque milia passuum*; Cic. orator 221 *haec enim in veris causis maximam partem orationis optinent.* **992** *nobis*: see n. to I 797. **993** *volucres* seems to be explained by *angor* and *curae*, but as a poet he joins them by the simple copula *atque*, and does not say *hoc est angor*, or the like: Ov. ex Pont. IV 13 11 *vires, quas Hercule dignas Novimus atque illi quem canis esse pares*; Cic. de fin. I 34 *in liberos atque in sanguinem suum tam crudeles fuisse*: see Madvig who cites Verr. V 184 *dignum capitolio atque ista arce omnium nationum*; Hahn pro Sulla p. 52: comp. the use of *et*, =id est, in II 615 *et ingrati genitoribus inventi sint*; and Juv. XI 123 *Grande ebur et magno sublimis pardus hiatu Dentibus ex illis quos* cet. *anxius angor* recurs VI 1158: comp. Cic. Tusc. IV 27 *estque aliud iracundum esse, aliud iratum, ut differt anxietas ab angore; neque enim omnes anxii qui anguntur aliquando, nec qui anxii semper anguntur, ut inter ebrietatem et ebriositatem interest, aliudque est amatorem esse, aliud amantem*: so that Lucr. may mean to express an abiding anguish; or it may be only one of his many poetical pleonasms and assonances: see n. to I 826 *sonitu sonanti*; and comp. Virgil's imitation Aen. IX 89 *timor anxius angit*; and Enn. trag. 256 *otioso in otio*, to which Cicero's rule might apply. *anx. angor* is Cicero's *aegritudo*: Tusc. disp. III 27 *cum omnis perturbatio miseria est, tum carnificina est aegri-*

tudo...lacerat exest animum planeque conficit. **996** *fasces* cet.: V 1234 *pulchros fascis saevasque secures*; Aen. VI 819 *Consulis imperium hic primus saevasque secures Accipiet*: in Lucr. *Nam petere imperium* follows immediately. **997** *Imbibit*: VI 72 *ut ex ira poenas petere inbibat acris*: Forc. gives examples of this use from Cicero and Livy. **1000** *nixantem*: IV 506 *nixatur*; VI 836 *nixari*: lexicons give no other instance except Aen. V 279, where indeed MPV have *Nixantem*, R *Nexantem*. **1001—1002** Odyss. λ 595 Ἤτοι ὁ μὲν σκηριπτόμενος χερσίν τε ποσίν τε Λᾶαν ἄνω ὤθεσκε ποτὶ λόφον· ἀλλ' ὅτε μέλλοι Ἄκρον ὑπερβαλέειν, τότ' ἀποστρέψασκε κραταιίς· Αὖτις ἔπειτα πέδονδε κυλίνδετο λᾶας ἀναιδής. **1001** *rusum*: see n. to 45 *prosum.* **1004** *explere* cet.: Nonius p. 424 '*expleri* et *satiari* hanc habent differentiam: *expleri* est tantummodo plenum esse, *satiari* supra modum et abundantiam. Lucretius lib. VI *Deinde animi ingratam naturam pascere semper, Atque explere boni: rebus satiareque numquam.* M. Tullius de re publica lib. VI *graves enim dominae* cet. *quae quia nec expleri nec satiari ullo modo possunt*' cet.: the words are practically synon. both in Lucr. and Cicero who in Cato 47 has *satiatis vero et expletis* with the order inverted. **1005** *circum cum redeunt* expresses Homer's περιπλομένων ἐνιαυτῶν. **1010** *potestur*: see n. to I 1045 *queatur.*

1011 see notes 1 and Servius there; and comp. Cic. Tusc. I 10 *dic, quaeso, num te illa terrent, triceps apud inferos Cerberus, Cocyti fremitus, travectio Acherontis,* Mento summam aquam attingens enectus siti Tantalus, *tum illud quod* Sisyphu' versat Saxum sudans nitendo neque proficit hilum, *fortasse etiam inexorabiles iudices Minos et Rhadamanthus?* in the lost vss. mention may well have been made of Cocytus, Acheron, Rhadamanthus or Minos, and of Ixion's punishment, and thus antecedents got for *Qui sunt*: in geor. IV Ixion's wheel is mentioned in the same way together with Tartarus, Cerberus and the furies; and his wheel would well represent some of the punishments on earth spoken of presently: in Ov. met. IV 465 Ixion is conspicuous among the rest; see too Sen. epist. 24 18 *non sum tam ineptus ut epicuream cantilenam hoc loco persequar et dicam vanos esse inferorum metus, nec Ixionem rota volvi nec* cet.; just below he continues *nemo tam puer est ut Cerberum timeat et tenebras* cet.: comp. Lucr. *Cerberus et furiae iam vero et lucis egestas*: Juv. XIII 51 also has *Nec rota nec furiae nec saxum aut vulturis* cet.: they none of them forget Ixion. **1012** *eructans faucibus aestus*: Aen. VI 297 *Aestuat atque omnem Cocyto eructat harenam*, 240 *halitus atris Faucibus effundens.* **1015** *luella*: see n. to I 39 *loquellas*: this word seems to be a ἅπαξ λεγόμ. **1017** *robur* must be the lowest dungeon in a prison, hence called *carcer inferior*, into which criminals were thrown before execution: Tac. ann. IV 29 *robur et saxum aut parricidarum poenas minitantium*; Livy XXXVIII 59 10 *ut in carcere...includatur et in robore et tenebris exspiret*: the famous *robur Tullianum*, still to be seen at Rome,

is described by Sall. Cat. 55; comp. too Paulus Festi p. 264 *robus quoque in carcere dicitur is locus quo praecipitatur maleficorum genus, quod ante arcis robusteis includebatur.* Some take *robur* to mean the *eculeus*; and Valer. Max. VI 8 1 joins *laceratus verberibus eculeoque inpositus, candentibus etiam lamminis ustus*; Sen. controv. 34 p. 387 Elz. *tortor cum ignibus flagellis eculeis*; and epist. 78 19 *plus est flamma et eculeus et lammina*: Cic. Verr. V 163 *cum ignes ardentesque lamminae ceterique cruciatus admovebantur*: the *flamma* of Seneca and *ignes* of Cicero = the *taedae* of Lucr. *pix*: Plaut. capt. 596 *te, si hic sapiat senex, Pix atra agitet apud carnificem tuoque capiti inluceat*: 'Victor. var. lect. VIII 14' J. E. M. **1018** foll. comp. Juv. XIII 192 *cur tamen hos tu Evasisse putes quos diri conscia facti Mens habet attonitos et surdo verbere caedit Occultum quatiente animo tortore flagellum.* **1018** the constr. appears to be *adhibet sibi stimulos terretque se*: comp. 68 *Unde .. Effugisse .. remosse*, and n. there. *conscius sibi* and *conscius factis* are both common, but not the double dat.; though Fronto, a mimicker of old writers, ad amicos I 15 has *cui rei mihimet ipsi conscius sim.* [But *sibi* may belong too to *praemetuens*: Caes. b. Gall. VII 49 1 *Caesar .. praemetuens suis*; Plaut. Amph. 29 *sibi si praetimet.*] **1020 1021** comp. Accius 577 *Neque ulla interea finis curai datur.* **1023** *stultorum*: the epicureans and stoics had many points in common, and among these that of calling the rest of the world fools: *stolidus* he twice uses, and both times of the stoics, as we have seen. With what precedes comp. Democr. frag. 119 Mullach from Stob. flor. CXX 20 ἔνιοι θνητῆς φύσιος διάλυσιν οὐκ εἰδότες ἄνθρωποι, ξυνειδήσι δὲ τῆς ἐν τῷ βίῳ κακοπραγμοσύνης τὸν τῆς βιοτῆς χρόνον ἐν ταραχῆσι καὶ φόβοισι ταλαιπωρέουσι, ψεύδεα περὶ τοῦ μετὰ τὴν τελευτὴν μυθοπλαστεύοντες χρόνου: comp. too V 1154 foll. and Epicurus and Seneca cited there.

1024—1052: you may say too to yourself 'the best and greatest kings conquerors sages and poets, Epicurus himself, have died; why should I then seek to live, who dream away life amid cares and delusions?' **1025** the words are from Enn. ann. 150 *Postquam lumina sis oculis bonus Ancu' relinquit*; the thought of this and the next v. from Iliad Φ 107 Κάτθανε καὶ Πάτροκλος ὅ περ σέο πολλὸν ἀμείνων: Lach. is doubtless right in making the whole of this passage a soliloquy of the reader. *sis*: see n. to I 1022 *se suo.* **1026** *improbe* is ἀναιδής, unconscionable, immoderate in expectation: as Hor. epist. I 10 40 *dominum vehit improbus*; and *improbe* in sat. II 2 104, 3 200; Pers. IV 47; Ov. met. VI 136 *vive quidem, pende tamen, improba*; Juv. IX 63 *Improbus es, cum poscis.* **1027** *rer. poten.*: see n. to II 13. **1029** foll. comp. 'Cic. de fin. II 112' J. E. M. **1029** *magnum*: he is thinking of the power of the sea generally without particular reference to the narrow Hellespont. **1031** *lucunas*: this spelling is confirmed by our mss. here and VI 538 and 552, and by M in Virg. geor. III 365: the change of ă into ŭ in

compounds is very frequent, as IV 605 *Dissuluit*; so *prosulio desulio insulio* in Plautus: comp. *calco* and *conculco* etc. *quatio* and *concutio* etc. *clam* and *occulo*, *rapio* and *surruptus* etc. a few instances out of many: the antiquarian Fronto has *corruptus* for *correptus*, and *surrupuisse*: Agam. 298 *Sub rupe reductus* of Flor. shews that Seneca wrote *Subrupere doctus*: Plaut. trin. 83 *surrupuisse* A: see Wagner there, and to aulul. 39. **1032** comp. culex 32 *Non Hellespontus pedibus pulsatus equorum.* **1034** *Scipiadas*: see n. to I 26 *Memmiadae*: the termination *-as* is confirmed by our mss. and those of Lucilius Virgil and Horace. *Scip. bel. fulmen*: Aen. VI 842 *geminos, duo fulmina belli, Scipiadas, cladem Libyae*; Silius VII 106 *ubi nunc sunt fulmina gentis, Scipiadae*: all these passages might have reference to a lost one of Ennius or other old poet, and it is natural enough that both the elder and younger Africanus should be termed thunderbolts of war; but then Cic. pro Balbo 34 says *cum duo fulmina nostri imperii subito in Hispania Cn. et P. Scipiones extincti occidissent.* Gnaeus and Publius were great generals; but still when they met so disastrous an end, it is strange that Cicero should call them the two thunderbolts of the empire. When we think of the words *scipio* and *scapus*, and the English *shaft*, and σκίπων σκᾶπτον σκῆπτρον, and then σκηπτός σκήπτω and cognate words, and their connexion with the thunderbolt, we might be tempted to think that the Scipios loved to refer their name to it rather than to the more homely staff. I find but one recorded coin of the family, and it has on the reverse a Jupiter with thunderbolt in the right and sceptre in the left hand; which might recall both meanings of the word. A parallel case would be the device of the Sibyl's head on the coins of the Cornelii Sullae, which was connected with the false derivation of their name from Sibulla, mentioned by Macrob. sat. I 17 27. Valerius Max. III 5 1 has this remarkable expression in relating the degeneracy of Scipio's son, *dii boni, quas tenebras e quo fulmine nasci passi estis!*—I now find that Fick, vergl. Woerterb. p. 202, connects all these Latin and Greek words with many Sanscrit words, and derives them from a root *skap, skvap*, (*skip, skvip*), 'to throw, hurl, set down heavily, press upon'. *Carth. hor.*: Silius XV 340 *Carthaginis horror*; Sen. epist. 86 4 *ille Carthaginis horror*; culex 368 (370) *Scipiadaeque duces, quorum devota triumphis Moenia . . Libycae Karthaginis horrent*; Prop. V (IV) 10 9 *Acron . . tuis quondam finibus horror erat*; Mart. V 65 2 *Nemees terror*, 5 *Silvarumque tremor*; Petron. 123, v. 238 *Magnus, Ille tremor Ponti.* **1035** *famul inf.*: after Enn. ann. 317 *e regno summo ut famul infimus* (mss. *optimus*) *esset*: [perhaps in Ennius the true reading may be *famul ultimus.*] Paulus Fest. p. 87 '*famuli* origo ab Oscis dependet apud quos servus *famel* nominabatur': with *famul* may be compared the many words ending in *r* which have lost the final *us*, as *puer vesper ager socer tener* and the like. **1036** *Adde, Adde*, as in

828 829; IV 1121 1122; VI 611 613; and Livy XXVI 41 12; Ov. ex Ponto II 2 75, 77 *Adde—Adde—adde.* **1037** *Hel. com.*: Aen. IX 775 *Cretheа Musarum comitem*; Hesiod theog. 1 Μουσάων Ἑλικωνιάδων, 99 ἀοιδὸς Μουσάων θεράπων; hymn. Hom. XXXII 19 ἀοιδοὶ Μουσάων θεράποντες. **1038** *Scept. pot.*: Accius 590 *sceptrum poteretur patris*; 'Antipater Thess. ep. 24 l. 6 εἰ δ' ὕμνων σκᾶπτρον Ὅμηρος ἔχει' J. E. M. *eadem aliis*: II 919 *animalia sint mortalibus una eademque*; IV 1174 *eadem facit, et scimus facere, omnia turpi. aliis* =ceteris: Plaut. trin. 944 *alii di*: Livy thus uses *alius* in the sing. with extreme frequency; he also has the plur. as I 7 3 *dis aliis*; III 54 2 *alii decemviri*; Ov. met. VI 408 *aliisque repertis*; IX 13 *alii cessere*: see too Draeger hist. synt. § 55, who says the usage is unknown to Cicero. **1039** *mat. vetustas*: his age at his death is variously given from 90 to 109 years. **1040** *memores motus* would produce memory, and thereby the power of consistent thought, just as the *sensiferi motus* produce sense. Lucr. by placing Democritus here would seem to give him rank next to Epicurus.

1042 *obit decurso*: Lach. in his elaborate note, after attempting to prove that the last syll. of *iit* and its compounds is always long, proceeds to shew that Lucr. could not have used the contracted form *obit* before a consonant: why? because the poets have three different usages in regard to these forms; a few, Phaedrus Seneca and Silius, admit them only before consonants or at the end of a verse; the old comic poets either before a vowel or consonant; most, Virgil Ovid Lucan Statius Martial and others, only before a vowel: now Lucr. twice uses them before a vowel, IV 339 (314) *Ater init oculos*, 771 *perit alioque*; unless therefore he chose to descend to the level of a comic poet, he could not also say *obit decurso*, as he had taken his stand on the other practice. This curious conclusion is refuted by Luc. Mueller de re metr. p. 399 in a few lines: Martial Lucan and Statius are placed by Lach. in the third and most correct class: but Martial not only says I 62 6 *abit Helene*, II 64 3 *transit et Nestoris aetas*; but also lib. spect. 16 1 *Raptus abit media*, X 77 2 *perit fecit*; Lucan not only has *abit aut*, but also IX 205 *obit Pompeio*, 1098 *perit caruere*; Statius not only *subit ibi* and the like, but also Theb. VII 439 *init fecitque*, X 205 *adit non*: these instances are given by Mueller. In addition Lucan VIII 85 has *perit quod*; 321 *abit aut unde redit maiore* in one v.; Juv. VI 559 *obit et*, 563 *perit cui.* What Lach. says of Virgil has some apparent support from mss., though that means little or nothing, as a large proportion of the oldest mss. of certain authors always write *-it* for *-iit*: Augustus in his res gestae has *adit*, where he meant I presume *adiit.* Taking then into account that poet's usual rhythm it seems almost incredible that he should five times have written *éxit, éxit, tránsit, tránsit, tránsit*; never once divided the word between two feet, *exít* etc.; nor used it in the 6th foot; Martial

does not hesitate to say *transit et*; take *audent fundunt* or any other word of the same quantity and see how the case stands with them. It may be said on the other side 'why is not *exiit* or *transiit* used by Virgil in the 5th foot?' but these words only occur five times; and I find that he uses *audiit* 13 times in all, 11 times in the first foot; of the two exceptions one is a case of repetition, *Audiit . . audiit amnis.* It is however possible that Virgil so placed these words as to give his readers the choice of taking them for a dactyl or spondee, as they pleased. Ovid's exceptional and repeated lengthening of *interiit abiit rediit* etc. as well as *petiit* seems done in defiance, as if he would say 'whoever is afraid to lengthen these words, I am not': his example appears to me rather to go against than support Lach.; nor is the *redieit venieit* occasionally found in old inscriptions any 'firmissimum argumentum': *sibei ubei ibei nisei quasei* occur in the new corpus inscr. more than 100 times, *fueit posedeit probaveit* are also found; yet Virgil surely might use all these short. Lach. quotes *redieit* from the titulus Mummian.; but the 2nd titulus, corp. inscr. 542, has the hexam. *De decuma, Victor, tibeĭ Luciu' Mummiu' donum*; and ib. 38 of one of the Scipios, *Maiorum optenui laudem ut sibeĭ me esse creatum*; ib. 1009 6 *Ubeĭ se reliquiae conlocarent corporis.* Neither Wagner philol. suppl. I p. 316 nor Conington Aen. II 497 accepts his Virgilian theory; and, as to Plautus, Fleckeisen in Jahn's Jahrb. LXI p. 59 foll. has deserted him and retracted his former opinion. Lucr. three times uses the contracted perf. of the first conj. I 70 *Inritat*, V 396 *superat*, VI 587 *Disturbat*: in each case a vowel follows; but it may be remarked that the reading in the two first instances rests on a conjecture, though a highly probable one.

dec. lum. vitae: Lach. says 'interpretes *vitae lumen* quomodo *decurratur* . . non recte explicant, scilicet obliti se in libro II 79 legisse *Et quasi cursores vitai lampada tradunt*': I much doubt this allusion, and am disposed with Lamb. to look on it as a mixture of two metaphors, *decurso vitae spatio* and *extincto lumine vitae*: it may have reference to the course of the sun: comp. the curious mixture of metaphors in Juv. IX 126 *festinat enim decurrere velox Flosculus angustae miseraeque brevissima vitae Portio*: Tib. IV 1 51 *Titan decurreret*; 160 *hibernas properat decurrere luces*; Sen. Med. 30 [*sol*] *Per solita puri spatia decurrit poli.* **1044** *Restinxit*: Cic. orat. 5 *nec ipse Aristoteles admirabili quadam scientia et copia ceterorum studia restinxit*: 'Leonid. Tar. ep. 49, t. I p. 233' J. E. M. **1046** *vivo atque videnti*, an alliterative proverb, as Lamb. has seen, strengthened by the oxymoron *Mortua cui vita est*: it occurs in Plautus and Terence and Cic. pro Sestio 59 *vivus, ut aiunt, est et videns cum victu ac vestitu suo publicatus.* **1048** *vigilans* cet.: Plaut. Amph. 697 and capt. 848 *vigilans somniat*; Pseud. 368 *Qui imperata ecfecta reddat, non qui vigilans dormiat*; so that this line too is proverbial: Ter. eun. 1079 *stertit noctis et dies.* **1049** *geris* is simply

habes: see n. to VI 1145 *gerebant*; and comp. old poet ap. Cic. de off. I 61 *Vos enim iuvenes animum geritis muliebrem, illa virgo viri*: *animum* or *animos gerere* is thus used by Livy IV 32 2; VII 31 6; XXXII 11 5; XXXVII 45 12; 54 24. **1051** *Ebrius* may here mean, having the mind disordered and stupefied, or else, reeling like a drunkard under the load of trouble: the metaphor is more obvious, when Horace speaks of one *fortuna dulci Ebria*, or Catullus of a lover's *ebrios ocellos.* **1052** comp. Pacuv. 302 *pertimefactus maerore animi incerte errans vagat.*

1053—1075: men feel a burden pressing on their minds; but if they knew why it weighs upon them, they would not live as they do, trying by constant change of place to escape from themselves: they would give up everything else to study the nature of things, since they have to learn what their condition is to be not for an hour, but for all eternity. **1056** *mali moles*: the assonance is evidently designed; as Cic. in Catil. III 17 *hanc tantam molem mali*; de orat. I 2 *maximae moles molestiarum et turbulentissimae tempestates*, where there is assonance and alliteration: Tusc. III 29 *molem meditabar mali*, after Eurip.; Livy IV 54 4 *multarum magnarumque rerum molem*; V 37 1 *tanta moles mali*; Sen. Herc. Fur. 1239 *perfer hanc molem mali.* **1058** foll. comp. Enn. trag. 256 *Otioso in otio animus nescit quid velit...Imus huc, illuc hinc; cum illuc ventum est, ire illinc lubet: Incerte errat animus, praeter propter vitam vivitur*; Livy XLI 20 4 *nescire quid sibi vellet quibusdam videri.* **1061** *revertit* pres. recurs V 1153: it is an archaism, as perf. *reverti* is common; but *reverto* for *revertor* does not elsewhere occur. Proll, de form. ant. Lucr. p. 44—48, in both places reads *revisit*; but in V mss. have *revertit*; and here *revisit* without *eas* or *ad eas* would be harsh. [In Apul. met. IX p. 648 Oudenorp. *revertit* is surely present; comp. also Pomponius 81 *Si eum nemo vocat, revortit maestus ad maenam miser.*] **1063** *mannos* were small Gallic horses famous for swiftness and evidently in great demand at Rome for use in harness; Horace mentions them in his odes epodes and epistles. *praecipitanter* seems not to occur elsewhere. [**1066** *gravis*: Ov. her. 14 33 gives the full expression *Iamque cibo vinoque graves somnoque iacebant*; met. X 438 *Nacta gravem vino Cinyram*: comp. with Lucr. Cicero 'c. sen. grat. egit' 13 *vini, somni, stupri plenus, madenti coma, composito capillo, gravibus oculis, fluentibus buccis, pressa voce et temulenta*; and Hor. epod. 2 57 *gravi Malvae salubres corpori* i.e. morbo.] **1068** *Hoc se* cet. quoted by Sen. de tranq. an. 2 14 *aliud ex alio iter suscipitur et spectacula spectaculis mutantur. ut ait Lucretius* Hoc se quisque modo semper fugit. *sed quid prodest, si non effugit? sequitur se ipse et urget gravissimus comes*: he rightly marks the antithesis between *fugit* and *effugit*; comp. Apul. met. VIII 24 *fortuna mea saevissima quam per tot regiones iam fugiens effugere...non potui*; Cic. de fin. V 20 *ne vitationem quidem doloris ipsam per se quisquam in rebus expetendis*

putarit, nisi etiam evitare posset; and Sen. epist. 93 at end *quid autem ad rem pertinet quam diu vites quod evitare non possis?*; Hor. epist. I 14 13 *In culpa est animus qui se non effugit umquam.* [For *fugit*.. *Effugere* comp. also Eur. Phoen. 1216 Ἢν μή με φεύγων ἐκφύγῃς πρὸς αἰθέρα; Aristoph. Ach. 177 Δεῖ γάρ με φεύγοντ' ἐκφυγεῖν Ἀχαρνέας.] **1069** *ingratis*: see n. to 935 *gratis*. *et odit* i.e. se: see n. to VI 1022 on Lucretius' love of parentheses like this. **1070** *morbi aeger* i.e. quia morbum sentit, sed quibus e causis fiat nescit: comp. 1053 foll. **1071** *rebus relictis*, well illustrated by Lamb. from Plautus and Terence, means *ceteris rebus relictis*: Caesar and Livy have *omnibus rebus relictis, omnibus omissis rebus, omissis rebus.* **1072** *Felix qui potuit rerum cognoscere causas*; and Epic. in Diog. X 143 οὐκ ἦν τὸ φοβούμενον λύειν ὑπὲρ τῶν κυριωτάτων μὴ κατειδότα τίς ἡ τοῦ σύμπαντος φύσις κ.τ.λ. **1070—1075**: men know not the cause of their disease: it is that from want of employment they are possessed with ennui; and from want of right employment they are disquieted with fear of death and suffering after death. If wise, they would study the true system of things, which would teach them the real nature of the eternity to come, and prove to them that they have nothing to fear. Once more his favourite moral.

1076—1094: again why such a craving for life mid troubles and dangers? death cannot be shunned: no nor does length of life create any new pleasure; while the future may bring evil as well as good fortune; and live as long as we may, the eternity of death will ever be the same. **1076** *in dub. periclis*, as 55. **1078** it is possible that the *equidem* of mss. comes from Lucr. as we cannot assume that he followed the mistaken theory, adopted by Cicero and many others, that *equidem* is *ego quidem*. **1081** *procuditur*: see n. to II 1115. **1082** like 957 *Sed quia semper aves quod abest, praesentia temnis.* **1084** *hiantis*, keeping up the metaphor of *sitis*. **1085** has a proverbial smack, as Virg. geor. I 461 *quid vesper serus vehat*; Gell. XIII 11 *lepidissimus liber est M. Varronis ex satiris Menippeis qui inscribitur* nescis quid vesper serus vehat; Livy XLV 8 6 *nec praesenti credere fortunae, cum quid vesper ferat incertum est.* **1087** *Nec prorsum*: see n. to I 748. **1090** *condere saecla*: Hor. od. IV 5 29 *Condit quisque diem*; Plin. epist. IX 36 4 *quamquam longissimus dies cito conditur*; paneg. 80 *cum tibi dies omnis summa cum utilitate nostra, summa cum tua laude condatur*: Virg. ecl. IX 52 has *longos.. cantando condere soles*, where Conington says *condere* to bury, for to see go down, and he and Heyne compare Callim. epigr. II 3 Ἠέλιον λέσχῃ κατεδύσαμεν: but such a use is better suited to *sol* or *dies*, than *saecla*, and it seems likely that Lucr. was thinking rather of the technical *condere lustrum*, though what the exact force of that expression is or how far it differs from *facere lustrum*, I cannot tell: yet Livy I 44 2 says *idque conditum lustrum appellatum, quia is censendo finis factus*

est, and Hor. od. II 4 24 *claudere lustrum*; so that the word must have suggested to them the notion of closing and completing: Livy XXXVIII 36 10 *censor...lustrum condidit...lustro perfecto*: so that *condere* is perhaps simply *conficere*: see n. to IV 41. **1091** *Mors aeterna*: 869 *mors inmortalis.*

BOOK IV.

1—25 = I 926—950, except 11 *Nam*, I 936 *Sed*; 24 *percipis*, I 949 *perspicis*; 25 *ac persentis utilitatem*, I 950 *qua constet compta figura*: see Lachmann's explanation of this last variation in notes 1 to 44—47; yet I do not think that Lucr. who like other early writers repeats words and phrases with such indifference, would have hesitated as to a single word *compta* with an interval of two vss.: the fact is *qua constet compta figura* would have been here utterly out of place, because what he says about the *figura* of the universe is said between I 950 and the end of II. 1 foll. Nonius again and again assigns to the fourth book; probably Quintilian also and Nemesianus, as Lach. says, read them in this book. Macrobius on the other hand, sat. VI 2, cites them from the first; and doubtless Virgil too found them there, as he imitates what precedes as well. They clearly belong to I; and can scarcely therefore be in place here, though the first editors, if not the poet himself, inserted them in both places. **25** *persentis*: III 249 he uses *persentiscunt*; but Virg. Aen. IV 448 also has *persentit*.

26—41: having explained the nature of the soul, I now go on to an important question, that of idols or images, which like small films constantly proceed from the surface of all things and float in the air, and often frighten us when sick or asleep: these we must not think to be souls from hell, which have survived the dissolution of the body. **26** *Atque* cet.: so III 31 he begins *Et quoniam docui* cet. **27** *compta*: see n. to I 950 *compta*. **28** *Quove*: see n. to I 57. *ordia prima* a curious transposition of *primordia* to be compared with 313 *ea propter*, VI 962 *et facit are*. **29** *vementer* cet.; comp. II 1024 *tibi vementer nova res molitur* cet. **30** *quae rerum simulacra voc.*: Epic. in Diog. Laert. X 46 τούτους δὲ τοὺς τύπους εἴδωλα προσαγορεύομεν: see n. to I 132 and II 112, where is said that he uses *imago imaginibus simulacra*, as the metre requires, and also *effigiae*, to express these εἴδωλα or τύποι of Epicurus. I have all through used 'idols' and 'image' as perfect synonymes for the synonymes *simulacra* and *imago* respectively. Catius a contemporary of Lucr., with whom Cicero and Cassius make themselves merry in ad fam. XV 16 and 19, used

the word *spectra*; Cicero himself *imagines*. 31 comp. 43 50 *summo de corpore rerum, Quoi quasi membranae* cet. 33—35 comp. I 132 *Et quae res nobis, vigilantibus obvia, mentes Terrificet morbo adfectis, somnoque sepultis, Cernere uti videamur* cet. and see n. there. 34 *figuras* is the word used by Quintil. inst. X 2 15 to express the εἴδωλα or *simulacra*: *illas Epicuri figuras quas e summis corporibus dicit effluere*: Orelli inscr. 4847 *Cum vita functus iungar tis umbra figuris.* 35 *simulacraque luce carentum* adopted by Virg. geor. IV 472. 37 *ne forte* cet. depends on 29 30 *Nunc agere incipiam* cet.: he here emphatically repeats what he said in the similar passage I 132—135, that it is to free man from these baseless terrors he undertakes this question: if it had not been for these fears, οὐκ ἂν προσεδεόμεθα φυσιολογίας: it is, echoes Lucr., the *naturae species ratioque* which alone can free us from them: comp. too what he says in a similar spirit III 31 foll. This passage has the same unfinished disjointed appearance that other passages introducing new subjects present: much that is said, has been similarly said before, or will be repeated presently: we have spoken of this above and shall have to refer to it again in V and VI: it is one of many tokens that the poem is in an unfinished state. 39 *aliquid nostri* is emphatic: Prop. V 7 1 *Sunt aliquid Manes: letum non omnia finit*; III (II) 34 53 *Nec si post Stygias aliquid rest arbiter undas*, as I read; [Ov. trist. IV 10 85 *Si tamen extinctis aliquid nisi nomina restat.*] 41 *discessum dederint*: see notes 1 and n. to I 819. Lucr. uses *dare* with the same latitude as Virgil and other poets: thus I 819 and elsewhere *dent motus* means 'impart motion' to others, but II 311 *dat motus*=facit motus, movetur; I 288 *dat stragem*=causes ruin, V 1329 *dabant equitum peditumque ruinas*=overthrew, but II 1149 *dabunt labem putrisque ruinas*, V 347 *darent cladem magnasque ruinas* are said of the things themselves falling to ruin: comp. too *dare pausam*=facere pausam, cessare; *dare sonitum, crepitum, fragorem*; *palam dedit*=palamfecit: all of which are found in Lucr. Virgil carries this use of *dare* farther perhaps than Lucr.: Aen. XII 575 *Dant cuneum*=faciunt cuneum: comp. too Aen. VI 76 *finem dedit ore loquendi*, which=Lucilius' *pausam facit ore loquendi*: Livy IV 28 6 *dant impressionem*; but 29 3 *impressionem factam*: he first uses *impetum dare*, and after him Tacitus, for *imp. facere*. When we thus find *dare finem, cuneum, motus, ruinas, discessum* etc. with the precise force of *facere finem* etc., one is tempted to look on it as a half-conscious reminiscence of the *do* which survives in *credo abdo condo subdo* and has the same origin as the Greek τίθημι and the Sanscrit *dadhâmi*: see Max Mueller science of language, 2nd series, p. 224 'in Latin it was equally impossible to distinguish between the roots *dâ* and *dhâ*, because the Romans had no aspirated dentals; but such was the good sense of the Romans that, when they felt that they could not efficiently keep the two roots apart, they kept only one, *dare*, to give, and replaced the other

dare, to place or to make, by different verbs, such as *ponere, facere*'. *quaeque* agrees with *primordia*: see n. to II 372.

42—109: that such films or images may be discharged from the surface of things, you may learn in many ways: smoke and heat are emitted in a state of solution; the coats of cicades, the slough of serpents in a state of cohesion: much more then may very thin films from their outermost surface leave things and keep their shape; just so colour is emitted, as you may see, when all things in a theatre take the hue of the awnings overhead: these images are so small as not to be visible separately; coming too from the very surface of things there is nothing to rend them: such images invisible singly, when often repeated may be seen reflected from the surface of mirrors. 42 *effigias*: this form is found below in 85 and 105, and in Plautus and Afranius. 50 Marullus' arrangement of these vss. I believe with Lach. to be right. *Quoi*: it is possible the *Qui* of mss. comes from Lucr. and that *qui*=*cui* or *quoi*, as *qum* and *qur* are found for *cum* or *quom*, and *cur* or *quor*: *qui*, dat., the mss. of Catullus give in 1 1, 2 3, 23 5: 107 1 *quicquid* for *quoi quid*; and in Virg. ecl. 4 62 either Quintilian has taken Virgil's dat. for a nom. *qui*; or else Virgil's mss. have wrongly taken his nom. *qui* for a dat. *Quoi* and *membranae* are both datives; and we have here another instance of that constr. which is so common in Lucr. as almost to amount to a trick of style: see n. to I 15: *imago* is put, not in the leading, but in the dependent clause: *quoi corpori quasi membranae est imago*: then, being unable to use the dat. *cortici*, he varies the phrase: *vel cortex nomin.* The correction *Quae* makes the sentence solecistic. 52 *cluet vagari*=vagatur. 53 repeated V 882. 54 55 *in rebus res*: 43 and 64 *ab rebus, rerum*; 90 91 *res, e rebus*; 100 foll. *rerum, rerum, rerum.* 58 *Cum teretis* cet.: comp. V 803 *Folliculos ut nunc teretis aestate cicadae Lincunt*: for *teretis* see n. to I 35 *tereti cervice.* 62 *auctas* of A is confirmed against *auctos* of B by Nonius more than once and by Philargyrius; though *vepres* is masc. in other writers: yet Keil's gramm. Lat. V p. 592 '*vepres* generis feminini, ut Titus Livius *has vepres*': ? T. Lucretius: in Hor. epist. I 16 8 mss. point perhaps to *benignae* rather than *benigni.* 63 *tenuis*, 66 *tenuia* and repeatedly below this word has the same poetical force which he often gives to *solidus, rarus, celer, profundus* and the like: it means enormously, inconceivably thin and fine: so 88 *suptili filo*: comp. also n. to I 1081 *magnum per inane.* 66 *hiscendi*, of 1018 speaking in the lowest whisper: see Mayor Cic. Phil. II 111 *respondebisne ad haec aut omnino hiscere audebis?* 69 *formai...figuram*; Cic. de nat. deor. I 90 *non ab hominibus formae figuram venisse ad deos*; but de off. I 126 *formam nostram reliquamque figuram*; de nat. deor. I 110 *formare figurare colorare*; Lucr. II 778 *ex aliis formis variisque figuris.* 76 *ferrugina*: the various usages of *ferruginus ferrugineus* and *ferrugo* being compared, the colour denoted would seem to be a dark violet, like

that of steel after it has been heated in the fire and cooled: Plaut. miles 1178 *Causiam habeas ferrugineam...Palliolum habeas ferrugineum, nam is colos thalassicust*; answering therefore to Homer's πορφύρεος or οἶνοψ applied to the sea; as in certain weathers the mediterranean has precisely such a colour. *magnis int.* cet.: VI 109 *Carbasus ut quondam magnis intenta theatris Dat crepitum malos inter iactata trabesque*: Propertius has *tam pleno fluitantia vela theatro*, and *Nec sinuosa cavo pendebant vela theatro*: in the theatres at Orange and Pompeii may still be seen the two rows of stone sockets running along the outside of their walls on the top, into which the masts fitted that supported the *vela* or *carbasa*; the *trabes* I presume were cross-beams which passed from one *malus* to another to allow the awning to be unfurled more conveniently. Pompey's great theatre, the first permanent one built at Rome, appears to have been finished the year of Lucretius' death; but the temporary wooden ones of which he had experience were probably constructed on a similar plan. Q. Catulus is recorded to have first spread these awnings: Pliny XIX 23, who calls them *carbasina vela*. [But see Friedlaender Sitteng. II p. 536; and Archaeological Journal vol. 32 p. 286 (J. H. Parker), of the Coliseum: 'it is now clear that there was an awning over the heads of the spectators in the galleries and kept at the height of 20 feet above their heads by masts on which it was suspended. Those at the top were known before by the corbels that supported them, and the holes through the cornice at the top of the building through which the masts passed. We have now found evidence of similar masts at the bottom, supported by corbels in front of the podium. It is probable that the cords which carried the awning were also supported by the columns on the outer edge of the upper gallery, as the distance would be too long for the cords to bear the weight with no intervening support': p. 287 'we also there (on the upper wall) see the mode of fastening the masts on the inner side of the wall to hold them fast.'] **77** *flutant*: III 189 *flutat*. **79** *patrum* cet.: the senators occupying the whole orchestra must have been very marked objects; and to a spectator, like Lucr., sitting in the *cavea* behind them, would have afforded as much room perhaps for the play of light and colour, as the whole of the stage. Aen. V 340 *Hic totum caveae consessum ingentis et ora Prima patrum magnis Salius clamoribus implet*: the last words may be a reminiscence of 1017 *magnis clamoribus omnia complent*. Tac. ann. XIII 54 *intravere Pompei theatrum quo magnitudinem populi viserent. illic...dum consessum caveae, discrimina ordinum, quis eques, ubi senatus percunctantur, advertere quosdam cultu externo in sedibus senatorum...degrediunturque et inter patres considunt.* *decorum*: Prop. V (IV) 1 11 *Curia, praetexto quae nunc nitet alta senatu*. [Juv. III 172 (of a rural in contradistinction to a city theatre) *ipsa dierum Festorum herboso colitur si quando theatro Maiestas...Aequales habitus illic similesque videbis Orchestram et populum.* **81** Ausonius 'clarae urbes' 5 *Circus, et inclusi moles cuneata theatri*, might defend *theatra*.] **83** *conrident* seems not to occur elsewhere in a classical writer. *correpta*, being gathered up into a small space: V 1223 *Corripiunt divum percussi membra timore*; Sen. epist. 74 27 *honestam vitam ex centum annorum numero in quantum voles corripe et in unum diem coge*; Suet. Domit. 4 *singulos a septenis spatiis ad quina corripuit.*

86 *utraque*: 291 *Aeribus binis quoniam res confit utraque*, and VI 517: Manil. II 904 *Nunc huc nunc illuc sortem mutantis utraque.* **87** *iam*, as now shewn. **88** *filo*: see n. to II 341. **98** (in) *speculis*: see n. to III 623. **101** *Extima* (simulacra) = orae imaginum: comp. 135 *Et cuiusque modi formarum vertere in oras*: they are mere surface with no depth, διὰ τὸ μὴ δεῖν κατὰ βάθος τὸ συμπλήρωμα γίνεσθαι, says Epic. in Diog. Laert. X 48 of the cognate συστάσεις: Cic. de nat. deor. I 123 of Epicurus' gods, *ut homunculi similem deum fingeret liniamentis dumtaxat extremis, non habitu solido*; and Macrob. sat. VII 14 4 calls them *inani figura*: Aen. VI 292 *tenuis sine corpore vitas Admoneat volitare cava sub imagine formae* will illustrate Lucr.: comp. the κοιλωμάτων of Epic., Diog. X 46; the word occurs in III 219 *Extima membrorum circumcaesura*, with same sense. **104** *rerum similesque*: see 79 and n. to II 1050. **105** *singillatim* cet.: Locke essay II 8 12 *since the extension figure number and motion of bodies of an observable bigness may be perceived at a distance by the sight, it is evident some singly imperceptible bodies must come from them to the eyes* etc. **106** *tamen* belongs to *cum*: V 479 *tamen cum sint ea quae moveantur*; 518 *tamen cum lucida signa ferantur*; 1088 *Muta tamen cum sint*; VI 140; 678; II 71: see also n. to II 29. **108** *Nec. rat. al. servari*: he means that unless they were inconceivably thin they could not pass unscathed through certain obstacles, for instance the air; by number then they make up for fineness, so as at last to be visible, *adsiduo crebroque repulsu.*

110—128: learn now how fine these images are: and first let me remind you how exceedingly minute first-beginnings are: think of the smallest animalcule, then of its heart or eye, then of the atoms which form its soul: what is their size? touch again a strong-scented herb with the tips of two fingers: what an amount of smell it emits! [what then must be the size of the atoms of smell? from all this you may conceive how thin these images or idols may be, and yet consist of material atoms:] such then fly about on all hands unseen unfelt. **110** *quam tenui*: in the words of Epic. in Diog. X 47 τὰ εἴδωλα ταῖς λεπτότησιν ἀνυπερβλήτοις κέχρηται. **112** *Sunt infra* cet.: see n. to II 138 and III 274 *Nec magis hac infra* cet. **114** *id quoque*, as well as the other point. *exor. rer. Cunct.*: see n. to II 333. **116** *quorum* = ut eorum; as II 970: how greatly would the revelations of the microscope have strengthened his argument! **123** *Praeterea* with reference to *primum*

of 116: in 120 *praeterea* merely connects its clause with those immediately preceding. **124** *panaces* is plur. from *panax*: the Greeks used the forms ἡ πανάκεια, τὸ πάνακες and ὁ πάναξ: Galen. de simpl. med. VIII 4 says εἴθισται οὐκ οἶδ' ὅπως ἤδη σχεδὸν ἅπασιν οὐ πάνακες ἀλλὰ πάνακα προσαγορεύειν τὴν πόαν ταύτην; and Lucr. is not likely to have used the masc. πανακής. **125** *Habrotoni*: Dioscor. III 26 says the Romans called this ἀψίνθιουμ Πόντικουμ. *centaurea*: see n. to II 401: both Virg. geor. IV 270 *Cecropiumque thymum et grave olentia centaurea*, and Lucan IX 918 *Et panacea potens et Thessala centaurea...fumoque gravem serpentibus urunt Habrotonum* seem to have been thinking of Lucr. **126** *duobus* i.e. digitis, for *digitis* doubtless followed, must have been proverbial: Plaut. Bacch. 675 *Quid...Sic hoc digitulis duobus sumebas primoribus?*; Persa 793 *Ne, sis, me uno digito attigeris*: Terence so uses *uno digitulo* and *digito uno.* **128** they have no force and therefore are *cassa sensu*, can one by one make no impression on any of the senses.

129—142: besides these images which come from things, there are others which form in the air of themselves and present the outlines of all kinds of shapes, giants mountains rocks beasts.—This passage, as Lach. has proved, is clearly a subsequent addition of the poet's, like several other passages, unconnected with the context; for 143 *Nunc ea* cet. directly refers to 128: for a possible explanation of the strange disorder of these vss. in the mss. see vol. I p. 30. Christ and others would put them after 109: but with that paragraph too they have no proper connexion. Lucr. refers to the συστάσεις or spontaneous appearances in the air, as a supplement to his discussion of the ἀπόρροιαι or images from the surface of things, not wishing to leave this question altogether untouched, because Epicurus had called attention to it, though it has not much bearing on his general argument: 735 he again refers to these, *passim simulacra feruntur, Partim sponte sua quae fiunt aere in ipso.* Diod. Sic. III 50 4 speaking of parts of the coast of Africa illustrates well what Epicurus and Lucr. meant: at certain seasons he says συστάσεις ὁρῶνται κατὰ τὸν ἀέρα παντοίων ζῴων ἰδέας ἐμφαίνουσαι· τούτων δ' αἱ μὲν ἠρεμοῦσιν, αἱ δὲ κίνησιν λαμβάνουσι, καὶ ποτὲ μὲν ὑποφεύγουσι ποτὲ δὲ διώκουσι κ.τ.λ. **132** *in hoc caelo* means in this lower part of the heaven called air: Epic. in Diog. X 48 καὶ συστάσεις ἐν τῷ περιέχοντι ὀξεῖαι διὰ τὸ μὴ δεῖν κατὰ βάθος τὸ συμπλήρωμα γίνεσθαι. *qui*: see n. to III 94. **135** *in oras*, that is the *extima pars*, the *extrema liniamenta*, as explained and illustrated to 101 *Extima*: comp. 166 *oris*, and Accius 484 *Scandit oras, laterum texta flamma Vulcani vorax.* **137** *mundi* =caeli, of course. **138** *Aera mulcentes*: Cic. Arat. 88 *Igniferum mulcens tremebundis aethera pinnis*; 184 *quam flatu permulcet spiritus Austri.* **138—142** such appearances seem to have tickled the fancies of the poets: the Socrates of the Clouds saw νεφέλην κενταύρῳ ὁμοίαν Ἢ παρδάλει ἢ λύκῳ ἢ ταύρῳ: Shakespeare's Antony all the objects mentioned by Lucr. *a cloud that's dragonish, A vapour sometime like a bear or lion, A tower'd citadel, a pendant rock, A forked mountain or blue promontory With trees upon't*; while *that which is now a horse even with a thought The rack dislimbs*; his Hamlet *a camel, a weasel, very like a whale*, perhaps the very *belua* of Lucr.; Wordsworth *an Ararat, a lion, a crocodile.*

143—175: images stream incessantly from the surfaces of all things: some things they pass through, by others they are broken; from others, at once hard and bright, they are reflected back: they stream as constantly from things, as light from the sun, so that as soon as a mirror is turned to a thing, its image appears in it at once: often too the sky in a moment is overcast with thick clouds: what a multitude then of these thin images must in an instant be shed from them, to allow of these being seen by us! **143** foll. Epic. in Diog. X 48 ἡ γένεσις τῶν εἰδώλων ἅμα νοήματι συμβαίνει· καὶ γὰρ ῥεῦσις ἀπὸ τῶν σωμάτων τοῦ ἐπιπολῆς συνεχὴς συμβαίνει...σώζουσα τὴν ἐπὶ τοῦ στερεμνίου θέσιν καὶ τάξιν τῶν ἀτόμων ἐπὶ πολὺν χρόνον κ.τ.λ. and Macrob. sat. VII 14 4 *censet Epicurus ab omnibus corporibus iugi fluore quaepiam simulacra manare, nec umquam tantulam moram intervenire quin ultra ferantur inani figura cohaerentes corporum exuviae*: Plut. def. orac. 19 explains the πολὺν χρόνον, by saying how ludicrous it is that these idols should appear in all directions during ἀπλέτους ἐτῶν περιόδους, often when the beings from whom they emanated have long been burned on the fire or have rotted in the earth. **146** *alias* is most simply taken for 'other things', except those mentioned afterwards; when the turn of the argument in 150 causes perhaps a slight anacoluthon: it might be 'some', as if he had intended a second or third *alias* to follow; but changed the constr. instead. **147** and **152** *vitrum*: 602 *Qualia sunt vitrei, species qua travolat omnis.* **147** (in) *aspera*: see n. to III 623. **150** foll. here and in what follows his theory involves him in enormous difficulties, some of which he gets over successfully; but hardly the present one. Glass he says lets every image pass: but mirrors, viz. of metal, do not let them even penetrate the surface, but send them back at once. And yet a little quicksilver would have made the glass hurl them back better even than the brightest polished metal; and surely he must have seen sometimes imperfect images sent back from glass. **152** *neq. aut.* recurs I 857, V 366, VI 103, 779: it is found in Plaut. aulul. 30; where Wagner cites Cic. ad fam. V 12 6: III 561 *nec autem.* **153** *quam*: the rel. has same force as in *qua est prudentia, quo animo traditur* and the like: it =therefore *ita meminit* cet. **160** *celer*: see n. to 63 *tenuis*: *celer* femin. is archaic: Ennius has *acer hiemps*; Livius Andron. *celer hasta*; Apul. met. X 31 *haec alacer*; a poem of Nero's time *volucer fama, silvester aedon*: on the other hand we find the masc. *celebris, salubris*, etc. in Tacitus and even Cicero and Livy: *celer* in fact is merely the abbreviation of *celeris*, as *puer* of *puerus*; Ennius having *acris somnus*, as well

as *acer hiemps*; and the genders were separated for distinction's sake: see Buecheler Lat. decl. p. 4. **166** *oris*: comp. 135 *in oras* and 101 *Extima*: the *ab rebus* of 163 shews of course that it is *oris rerum* of which he is speaking. **167** *res*, the images, which are *res* or real things in being, as much as the things from which they come: 160 *celer his rebus dicatur origo*; 235 *in luci quae poterit res Accidere ad speciem quadrata, nisi eius imago*; 690 *mitto iam dicere quam res Quae feriunt oculorum acies visumque lacessunt*; and also I 132 *Et quae res nobis, vigilantibus obvia, mentes Terrificet*: see n. there. *ibi* i.e. in speculo. *respondent* i.e. *oris* of the thing from which the images come. **168—175** these vss. appear to me to have nothing to do with the συστάσεις of 129—142, with which Lach. connects them: the sense is obscure and briefly put; but they are a continuation of the argument immediately preceding, and illustrate *quam facili et celeri ratione* images are produced; for the clouded sky can only be seen by means of them, and each image forms an inexpressibly small part of the whole. **168** *caeli Tempestas . . fit turbida foede*: Virg. Aen. XII 283 *it toto turbida caelo Tempestas telorum*; geor. I 323 *Et foedam glomerant tempestatem*: *foeda tempestas* is a very favourite expression of Livy. **169** *Tempestas*: II 32 *Praesertim cum tempestas adridet*, and V 1395. **170—173** = VI 251—254, except 170 *rearis* for *reamur*. **171** *caeli . . cavernas*: 391 *Sidera cessare aetheriis adfixa cavernis*; as Cic. de suo consul. in de div. I 17 *Aetheris aeterni saepta atque inclusa cavernis*. Lamb. quotes Cic. Arat. 252 *late caeli lustrare cavernas*, and Varro in Nonius p. 46 *Nubes aquali frigido velo leves Caeli cavernas aureas subduxerant*: Varro de ling. Lat. V 19 *Ennius item ad cavationem* caeli ingentes fornices; so that doubtless his own *cavernas* had reference to this derivation of *caelum*. **172** *tae. nim. nocte*: Virg. geor. I 328 *media nimborum in nocte*. **173** *atrae* cet.: Aen. XII 335 *circumque atrae formidinis ora*. **174** *Quorum quantula* cet.: and therefore the images being so prodigiously thin, what a number must leave in order to impress our sense on earth.

175 *eam rat.*: the *ratio* between the *imago* and the overcast sky is such that no sum can express it.—Comparing what precedes, esp. 163—167, I certainly take the meaning to be: sometimes we see a bright sky covered in a few moments with thick clouds: well, the sky is so covered first; and then we see it by images shed from the clouds, which, singly invisible, only become visible by continuous repetition, the ratio of their thickness to that of the clouds being something so small as to be almost inexpressible by words or figures: how inconceivably numerous then must they be for so many to have reached us in so short a time! But Prof. Mayor writes to me: 'Lucr. is speaking, 164 165, of two things, the rapidity with which these images are forming and their universal diffusion: *quantula pars* seems not to relate to the thinness of the image of these faces of horror, but to its narrowness as contrasted with the

faces themselves which fill the whole width of the sky'. From nothing in Lucr. or Epicurus or any of their expositors, ancient or modern, have I been able to gather what their conception was, if they had one, of the superficial extent of an image; whether for instance when you saw a thing of large extent, you saw it by a succession of single images, or of many images, advancing in parallel order and preserving their relative positions.

176—229: the velocity with which these images travel is enormous: light things made of fine atoms often travel very swiftly, as sunlight; it is natural then that these images should do the same; of which too there is a constant succession one following on the other like light or heat from the sun: again these images proceed from the very surface of things and should therefore travel more swiftly than light: a proof of the prodigious swiftness of these images is this: put water in the open air, and at once all the stars of heaven are reflected in it. As images come from all things to the sight, so do things producing smell taste sound and the like; so that all the senses are similarly moved. **179** *quem quaeque locum*: see n. to I 966 *quem quisque*: it = in quemcumque locum haec vel illa tendunt. The wretchedly scanty fragments from the 2nd book of Epicurus περὶ φύσεως, published in the vol. Hercul. II, are yet enough to indicate that Lucr. followed it as his guide: col. 1 we find περὶ δὲ τῆς κατὰ τὴν φορὰν ὑπαρχούσης ταχυτῆτος νῦν λέγειν ἐπιχειρήσομεν. πρῶτον μὲν—ἡ λεπτότης μακρὰν τῆς ἀπὸ τῶν αἰσθήσεων λεπτότητος—ταχυτῆτα τῶν εἰδώλων—ἀνυπέρβλητον δείκνυται: col. 2 εἰ δ' ὑπερβαλλόντως κοῦφα δῆλον ὡς καὶ ὑπερβαλλόντως ταχέα κατὰ τὴν φοράν: col. 11 καὶ ἔτι τὰς φορὰς ἀνυπερβλήτους τοῖς τάχεσιν κέκτησθαι· our v. seems intended to express Epicurus' κατὰ τὴν φοράν. *numine*: see n. to II 632. **180—182** = 909—911. **180** *Suavidicis* seems not to occur except in these two places: Plaut. capt. 56 has *spurcidici versus*; and Ter. Phorm. 213 *saevidicis dictis*. **181 182** clearly borrowed from Antipater of Sidon who was popular in Rome a generation before Lucr.: he says in praise of Erinna anthol. II p. 19 epigr. 47 7 Λωίτερος κύκνου μικρὸς θρόος ἠὲ κολοιῶν Κρωγμὸς ἐν εἰαριναῖς κιδνάμενος νεφέλαις: the *gruum clamor in aetheriis* is probably from Homer's κλαγγὴ γεράνων οὐρανόθι πρό: Aen. X 264 *sub nubibus atris Strymoniae dant signa grues atque aethera tranant Cum sonitu fugiuntque notos clamore secundo*: the *aethera tranant* perhaps from 177 *tranantibus auras* and 182 *in aetheriis*. **182** *in aether. nub.*: see n. to I 250 and II 1115. **184** *celeris*, as 160 *celer*. **186** *e primis*: II 313 *Primorum*. **187** *cuduntur*: I 1044 *Cudere enim crebro possunt* i.e. plagae. **190** *protelo* explained to II 531: comp. 187 188: 'brightness is goaded on by brightness, the foremost beams ever urged on by those behind' J. E. M. **192** *Inmemorabile per spatium* recurs VI 488: par. lost VIII 113 *distance inexpressible By numbers that have name*; and comp. Epicurus himself in Diog. X 46 ἡ διὰ τοῦ κενοῦ

φορὰ κατὰ μηδεμίαν ἀπάντησιν τῶν ἀντικοψάντων γινομένη πᾶν μῆκος περιληπτὸν ἐν ἀπερινοήτῳ χρόνῳ συντελεῖ. **193** *parvola* i.e. simulacra, has force by being thus placed at the beginning instead of after *quae*; they are exceedingly small and therefore the propulsion is easier: the ambiguity in *parvola causa* was quite indifferent to Lucr.: see n. to I 57 *perempta* and to V 1414 *res illa reperta.—parvola* must then-tenuissima; as if the poet only thought of their thinness, and of no other dimension. But Prof. Mayor says 'they have at their back a slight cause, not too violent which might destroy them, i.e. succeeding images'. Here again, as above, the immense difficulties of the theory seem to occasion a vagueness in the poet's mind and therefore his language; if indeed we have his own words complete. I have often thought myself of a hiatus: Susemihl I see assumes a v. to be lost between *parvola* and *causa*: I have thought too of *praeria* (i.e. simulacra) for *parvola*. *causa*: the cause behind which impels them is the body from which they come constantly emitting from the surface images, as the sun discharges light; this therefore is to be compared with 189 *Suppeditatur* cet. **194** *prŏpellat*, as VI 1027 *Aer a tergo quasi provehat atque propellat*; which also illustrates the sense: *procul* seems to belong to *prov. atque prop.* **195** *Quod sup.*: see n. to I 50. *vol. lev.*: comp. 745 *Quae cum mobiliter summa levitate feruntur, Ut prius ostendi*; and Epic. cited to 179. **197** *quaevis* must not be too much pressed, as if it meant all things without exception: they can *enter*, not necessarily pass through, hard things, even wood and stone, though they may get broken in them. But then the necessity of his theory compels him to devise the curious explanation in 150 of things at once hard and bright throwing the images back. **198** *permanare*, stream clear through, not merely *penetrare*. **203** *rigare*: V 593 *Tantulus ille queat tantum sol mittere lumen, Quod maria ac terras omnis caelumque rigando Compleat et calido perfundat cuncta vapore*: the repetition of *caelum* in our vss. is harsh; but the *mare ac terras* made it almost inevitable, and such repetitions are in the manner of Lucr. and the old writers. **204** *igitur*: comp. 520 and 865, and see n. to I 419. **205** *emissum* is another ἅπαξ λεγόμ. **206** to change *Quone* to *Nonne* can hardly be right: the sense you want is not simply 'don't you see they ought to travel faster?', but 'don't you see they ought to travel immensely faster?'; and why should the common formula *nonne vides* have been altered? *Quo* is for *quanto* as so often in the best writers: sometimes *ne* is annexed to the relative, as in Catull. 64 180 *quemne ipsa reliqui?* i.e. patrisne quem reliqui?; 183 *Quine fugit?* i.e. coniugisne qui fugit?: but here *Quo* is the interrogative and more resembles Plaut. cist. IV 1 1 *Nullam ego me vidisse credo magis anum excruciabilem, Quam illaec est: quae dudum fassa est mihi, quaene infitias eat?*; Hor. sat. II 3 295 *Quone malo mentem concussa?*; Lucan VII 301 *Quone poli motu, quo*

caeli sidere verso, Thessalicae tantum, superi, permittitis orae?: comp. too Hor. sat. II 3 316 *illa rogare, Quantane?*; [Ov. met. III 476 *quam cum vidisset abire, 'Quone fugis? remane'...clamavit*: and see Ussing to Plaut. Amph. 690.] Lach. gives a curiously inappropriate illustration from Quintil. I 10 3 *aut quo melius vel defendet reum* cet. where *quo melius* has a force exactly contrary to *quo citius* here. **207 208**=II 163 164; and comp. what precedes; for *debent nimirum!* expresses what *quo . . debere!* does here.

211 *dīu*: with *diu* and *divo* comp. *fretu* and *freto* and n. to I 720, and *humu* and *humo* in Nonius p. 488: *diu*, abl. of *dius*, is found in the best mss. of several authors. **213** the *sidera mundi* are the reflected stars of the reflected heaven which answer in the water to the real stars of the real heaven: 167 *Res ibi respondent simili forma atque colore*: see n. to 419. **215** *accidat in*: *accidere ad* is the usual constr. as 236: Wak. compares Ov. fasti V 360 *Accidere in mensas ut rosa missa solet.* **218** foll. are placed here to shew that it is natural the sense of sight should be affected only by images coming into contact with the eye, since all the other senses are likewise affected solely by material objects; but certainly the parallel is introduced very abruptly: 217—229 recur VI 923—935 with very slight difference; they appear to have been written for VI, and brought hither by the poet, perhaps as a temporary makeshift: see notes 1. **220** *exesor* seems not to occur out of Lucr. *moerorum*: see n. to I 29 *moenera*: *moerorum* is found three times in the Aeneid joined with *agger*: Lucr. has also *noenu*, *poeniceus*, *poenibat*; Cic. pro Mil. 33 *poenitus*, 35 *poenitor*; the corp. inscr. Lat. I has *moiro moiros moerus* among a hundred other instances of *oi* or *oe* for *u*. **224** *amaror*: whether Virg. geor. II 247 used this word is a moot point; see Gellius I 21 and the editors of Virgil. **225** *fluenter* seems another ἅπαξ λεγόμ. **227** *interdatur*: 868 *interdatus*. **229** see notes 1: *sentire sonare* is by no means an unpoetical expression; and to object to the *sentire* in two consecutive vss. in two senses is strange in an editor of Lucr.: see 201 202 *caeli, caelum*, and note to I 875. With reference to the above argument of Lucr., Macrobius sat. VII 14 5 says not unaptly *ad haec renidens Eustathius 'in propatulo est' inquit 'quod decepit Epicurum. a vero enim lapsus est aliorum quattuor sensuum secutus exemplum, quia in audiendo et gustando et odorando atque tangendo nihil e nobis emittimus, sed extrinsecus accipimus quod sensum sui moveat. quippe et vox ad aures ultro venit et aurae in nares influunt et palato ingeritur quod gignat saporem et corpori nostro adplicantur tactu sentienda. hinc putavit et ex oculis nihil foras proficisci, sed imagines rerum in oculos ultro meare'.*

230—268: we feel a thing in the dark, and know it to be the same as we saw in the light: if what we feel is square, what square object can come in the light to our sight except its image, since a like effect must

have a like cause? images proceed from things in all directions; but as we only see with the eyes, we only see images where we turn our sight to them. Again an image pushes before it the air between it and the eye; this air all sweeps through the pupil, and lets us judge of the distance of the object seen; and all this takes place almost instantaneously: we do not see the images singly, but we see the object by a continuous succession of these; just as we do not feel each particle of wind, but the effect of the whole: and so too we thump the surface of a stone, but feel its inner hardness. **233** *Cons. causa*, since the effect is *consimilis*. **235** *luci*, **232** *luce*: comp. I 976 *fine*, 978 *fini*, 979 *fine*. **236** *ad speciem*, **242** *speciem*; as v 707 and 724 *Ad speciem* for the sight or eyes: *speciem* and *oculi speciem* are so used by Vitruvius: I 321 *speciem* = potestatem videndi. **245** *internoscere curat* = of course *curat ut nos internoscamus*; *intern.* therefore is equivalent to an acc. of the subst.: see n. to I 331 and 418. [The *ut videamus* makes the *internoscere* = *ut internoscamus* less violent: surely Ennius' *audere repressit* quoted by Lach. is more harsh: comp. too Cic. epist. XV 15 2 *ut ipsum vinci contemnerent*; Plaut. Bacch. 156 *hic vereri perdidit*: see Draeger hist. synt. I p. 305.] **255** habit making the whole appear one and the same operation; just as in fact habit makes the seeing a solid object and the inference that it is solid appear but a single operation. **262** *unorsum*: Lach. compares *oinvorsei* in the inscr. de bacchanal. 19, and *undecim unanimus unanimitas unoculus*. **266** *extremum, summum, penitus, in alto*, the same thing in different words to increase the force of the contrast: a very favourite artifice of his.

269—323 (347): the image is seen not at the surface of the mirror, but beyond and within it in the same way that real objects are seen through and beyond an open door, namely by two airs: it was explained above, 246 foll., how the distance of an object from the eye was perceived by means of the air between it and the eye: thus you see first the distance of the open doorway by one air, then comes another air between the doorway and the object outside, which lets you see how far it is beyond the door: thus too the mirror and its distance from us is seen by means of its image which propels before it the air between the mirror and the eye, which first sees this air, then the mirror; then when we have perceived the latter, the image which goes from us to it, comes back to us, but drives onward an air which is seen before the image, and makes it appear so far distant beyond the mirror. Again our image in the mirror has the right answering to our left, the left to our right, because on coming against the mirror it is dashed straight out in the reverse direction, like a wet plaster-mask thrown against a post. Again a series of mirrors disposed in a certain way can bring into view all the recesses and turnings of a building. Again concave mirrors shew our image with right answering to right, left to left. Again the images step and move as we do, because when you withdraw from any part of the mirror, images cannot come from that part of the mirror. **271** *Quod genus*: see n. to II 194. *vere*: to me it appears marvellous that Lach. should say '*vere* non modo supervacaneum est, sed caret sensu': it clearly refers to the real objects seen by images coming from them directly in contrast to the mere reflexions from a mirror, of yourself for instance: 258 *res ipsae perspiciantur*. **271** and **278** *transpiciuntur*, **272** *transpectum* occur in no other writer of authority. **274** *duplici geminoque* appears a pure tautology: 451 *Binaque per totas aedis geminare supellex*; 766 *mortis letique potitum*; 1004 *facies atque ora tuantur*; v 5 *Pectore parta suo quaesitaque praemia*; 1025 *bonu magnaque pars*; 1085 *aquam dicuntur et imbris Poscere*; 1078 *genus alituum variaeque volucres*; 1191 *faces caeli flammaeque volantes*. **277** *perterget*: 249 *Et quasi perterget pupillas* and 252 *Et nostros oculos perterget longior aura*: comp. the whole argument there. **278** *et illa*: and then those things by means of the images streaming from them incessantly. **280** *protrudit* cet.: comp. the quite similar argument 246 foll. **290** *Illic* i.e. ab speculo tantum semota. **291** *utraque* i.e. both in the case of things seen through the open door and in a mirror: see n. to 86. Lucr. seems to have thoroughly felt that distance was not perceived by the eye, but was a matter of mere inference. **298** *fronte* = a fronte: the mask must be dashed straight on the post so as to preserve the right lines of the features in front: otherwise if it were struck obliquely so as to distort the lines, the face could not keep its shape when struck back. **301** *e laevo sit*: I 186 *fierent iuvenes subito ex infantibu' parvis*; Ter. Andr. 37 *feci ex servo ut esses libertus mihi*; Aen. x 221 *nymphasque e navibus esse Iusserat*; Pers. VI 11 *Quintus pavone ex Pythagoreo*; Livy IX 39 7 *fit ex secunda prima acies*. *mutua*: see n. to II 76. **303** *sexve*: Florus II 18 (IV 8) *sex septemve*: it is possible that Lucr. wrote *Qu. et. sex*, on the analogy of *sex septem*, which occurs in Cicero Terence and Horace, though 577 Lucr. has *Sex etiam aut septem*: just as Sen. Herc. Fur. 1006 has *Bis ter* on the analogy of *ter quater*. **308** *speculo*: the omission of the prep. seems harsh; and perhaps *e* should be read: but *speculo* may be the abl. instrum. **309** *rusum*: see n. to III 45. **310** *eodem eādem eaedem idem* plur. and *isdem*, as said to I 306, are found as disyll. in Lucr.: the last three are never with him trisyll.

311 '*specul.* it is simpler to take as gen. after *latuscula*' J. E. M. **313** *Dextera sim.* i.e. images turned as a man would be if looking at himself, right answering to right, left to left; whereas, as he has just explained, the image from a flat mirror is exactly inverted, right answering to left, left to right. *ea propter* i.e. propterea: see n. to 28: Bentl. after Servius Virg. ecl. VII 31 reads in Ter. Andr. 959 *Ego deorum vitam ea propter*; Nonius too quotes the word from Pomponius, and *hac propter* from Varro. **315** *elisa bis*, just as if the plaster-mask were first

struck out as described above, and then were struck back by a second process to its original direction. **316** *Circum agitur*: not struck out at all, but only twirled round so as to face its object. **317** *docet*: he gives the mirror ἐνέργεια, as 579; and 153 *quam meminit levor praestare salutem.* *conv. ad nos* 'seems to mean simply to turn round towards us. The plane mirror makes the image return back foremost, the concave mirror makes it face round and so return fronting us' J. E. M. The phenomenon described by Lucr. in these last verses is quite true and simple, whatever be said of his explanations of it, on which indeed he seems not himself to lay much stress. Editors are strangely at sea about a very easy matter. From seeing my image turned upside down in the bowl of a silver spoon I hastily concluded, as I find Gassendi has done, that a concave mirror always gave an image thus inverted. A distinguished mathematical friend has however proved to me both by optical and ocular demonstration that this inversion is caused by the vertical, not in the least by the lateral curvature. A mirror, laterally concave, such as I have before me at this very moment, gives back your image turned as Lucr. asserts, i.e. facing you just as if you were facing yourself, right answering to right, left to left. Probably the Romans had metal mirrors of this shape for the purpose of getting such an image; the other side being convex, so as to suggest to Lucr. his comparison 'lateris nostri'. **323** *ad aequos flexus*: he refers no doubt to the angle of reflexion being equal to the angle of incidence; a fact well known to the Greek and Roman geometers of his day; of which Lucr. therefore would not be ignorant. How far it can be reconciled with his general theory of images, I hardly know: an acute correspondent has pointed out to me many of the difficulties which such an attempt involves. But the mathematician just mentioned shews me in what way he thinks these difficulties may be got over; and indeed we see in the 5th and 6th books that Lucr. was sufficiently indifferent to discordant or seemingly discordant theories standing side by side. My correspondent rightly shews I think that in 320 *recedas* refers to a person moving along a mirror parallel to its plane, not stepping back from it. It must be remembered that the ancient mirrors were but a few inches in diameter; and would perhaps not suggest to Lucr. some difficulties which our large looking-glasses might have done: 322 *Omnia* are all objects generally which can impinge, a ball and the like as well as an image.

324 (299)—378: this theory of images will explain many other things: you cannot gaze on the sun, because of the force with which images come from it, and the seeds of fire mixed in them: the jaundiced see all things of a greenish yellow, because of the atoms of this colour which proceed from them and meet the images: we see out of the dark things in the light, because a bright clear air, advancing before the images of things in the light, purges the eye of the gross air of darkness,

the former air being much more minute and penetrating than the latter: we cannot see what is in the dark, because the gross air comes behind the bright and blocks up the sight against all images: a square tower from a distance looks round, because the images are blunted in their long journey through the air: our shadow seems to follow us and move as we do, because it is really nothing but air without light: one part of the earth after another being shaded from the sun as we advance, and the parts before covered by us left exposed as we leave them. **324** *tueri* appears to be governed by *fugitant* as well as *vitant*: he has elsewhere *fugitant relinquere*, *fugitabant visere.* **325** *tendere* i.e. oculos: Virgil has *Ad caelum tendens lumina, oculos telumque tetendit*; Ovid *oculos et bracchia tendens*: I 66 Nonius Lamb. and Lach. read *tendere .. oculos.* **326** *alte*, which generally means 'on high' or 'to a height' or 'depth', seems here to mean 'from on high'; so 1182 *alte sumpta querella*, 'from the depth'; [and Varro Menipp. 272 B (p. 186 Buech.) *At nos caduci naufragi ut ciconiae...:alte maesti in terram cecidimus*:] see n. to I 65 *super*, and to II 1153 *superne.* **332** *Lurida*, **333** *luroris*: Paulus Fest. p. 120 *luridi supra modum pallidi*, which seems true of paleness on a dark complexion; so Catull. 64 100 *magis fulgore* (*fulvore* Ritschl) *expalluit auri*: Apul. met. IX 30, with whom *luror* is a favourite word, *lurore buxeo macieque foedata.* **333** *Arquati*: Nonius p. 35 *arquatus morbus dictus, qui regius dicitur, quod arcus sit concolor de virore vel...Varro Eumenidibus* nam ut arquatis et lutea quae non sunt et quae sunt lutea videntur: VI 526 Lucr. has the form *arqui.* **336** *palloribus*: III 154 *Sudoresque.* **339** *init*: see n. to III 1042. **340** *candens lucidus*: II 767 *canos candenti marmore fluctus*; 771 *candens videatur et album*; V 721 *candenti lumine tinctus*: comp. IV 624 *Umida linguai sudantia templa.* **341** *discutit umbras* is in Virg. geor. III 357. **342** *multis part.*: see n. to I 735. **361** *quasi ad tornum terantur*: Virg. geor. II 444 *Hinc radios trivere rotis*, which Servius explains *tornavere, composuere de torno*: Forc. cites also Pliny nat. hist. XXXVI 193 *aliud* (vitrum) *torno teritur*: comp. Petron. frag. 29, who seems at once to imitate and contradict Lucr., *Fallunt nos oculi vagique sensus Oppressa ratione mentiuntur. Nam turris, prope quae quadrata surgit, Detritis procul angulis rotatur*; for see 379 *Nec tamen hic oculos falli* cet.; and indeed Lucr. may have written *rotentur*: *terantur*=exactly *rotatur* of Petron. who says *rotatur* not *rotata est*: the pres. expresses the process going on as long as you look at it. *ad tornum*: II 378 *neque facta manu sunt Unius ad certam formam*: comp. Livy I 19 6 *ad cursus lunae in duodecim menses describit annum*; XLIV 11 5 *non ad eandem crassitudinem structos esse*; XXIX 6 10 *scalas ad editam altitudinem arcis fabricatas*; Caes. de bel. Gall. V 42 5 *turres ad altitudinem valli*; Juv. VI 324 *omnia fient Ad verum.* **363** *adumbratim* seems not to occur elsewhere: Cicero says *non expressa signa sed adumbrata virtutum.* *simu-*

lata: see n. to I 687. Sextus adv. math. VII 208 οὐκ ἂν εἴποιμι ψεύδεσθαι τὴν ὄψιν, ὅτι ἐκ μακροῦ μὲν διαστήματος μικρὸν ὁρᾷ τὸν πύργον καὶ στρογγύλον ἐκ δὲ τοῦ σύνεγγυς μείζονα καὶ τετράγωνον, ἀλλὰ μᾶλλον ἀληθεύειν, ὅτι καὶ ὅτε φαίνεται μικρὸν αὐτῇ τὸ αἰσθητὸν καὶ τοιουτόσχημον, ὄντως ἐστὶ μικρὸν καὶ τοιουτόσχημον, τῇ διὰ τοῦ ἀέρος φορᾷ ἀποθραυομένων τῶν κατὰ τὰ εἴδωλα περάτων κ.τ.λ. **366** *si credis* implies an absurdity: I 1057 *Ipsum si quicquam posse in se sistere credis*; where see note. **368** *lumine cassus*: 377 *spoliatur lumine terra*, V 719 and 757 *cassum lumine corpus*: Aen. II 85 *cassum lumine*, XII 935 *corpus spoliatum lumine*, the sense being quite different: see n. to I 253. **372** *quod l. eius*: a favourite constr. of Livy, as III 14 3 *quod Caesonis sodalium fuit*; XXII 4 1 *quod agri est*; XXX 20 5 *quod roboris in exercitu erat*: and of Terence, as heaut. 1048 *quod dotis dixi*: Catull. 22 21 *manticae quod in tergo est*. [Draeger hist. synt. p. 421 for *quod eius* quotes Livy V 25 and other passages: for Lucr. and Catullus see what precedes and follows there.] **374** *e regione* i.e. recta linea: comp. VI 344 *E regione locum quasi in unum cuncta ferantur*; and other passages of Lucr. Cicero and Livy there cited. **376** *lana trah.*: fresh wool at the same time constantly taking the place of what is consumed. **378** *abluit umbras*: 875 *sitis de corpore nostro Abluitur*, an equally expressive metaphor.

379—468: in all this the eyes are not deceived; what they see, they rightly see; it is the mind that errs in the inferences it draws: this applies to thousands of things in which the senses seem to be mistaken; when we are in a ship which is moving, it seems to be at rest, and things which it passes to be in motion: the stars which are in perpetual movement, appear to stand still: if you look down a long colonnade, the roof and floor and the sides seem at the other end to converge to a point; out at sea the sun appears to rise from the water and to set in it; the parts of a ship under water look bent and twisted upwards; when clouds scud across the sky, the stars seem to move the other way; if you press the eyeball beneath, you see all things double; when fast asleep in a small room in the dark, you often think you see daylight and are travelling over wide distances: in all this the error lies in the opinions which the mind superinduces upon what the senses really perceive. **383** *diximus*, in 368 foll. **385** *naturam rerum* here = causas rerum. **386** *vit. oc. adfingere*: Cic. de imp. Cn. Pomp. 10 *ut neque vera laus ei detracta oratione mea neque falsa adficta esse videatur*. **387** *Qua veh. navi*: see n. to I 15 *capta...quamque*. **391** *cavernis*: see n. to I 171. **392** *adsiduo sunt motu*: elsewhere he uses the more common constr. *esse in motu*: see n. to I 999. *motu esse* without the adj. could hardly be said; but *adsiduo* implies the state or condition of the motion; and Madvig Lat. gram. 272 2 teaches that both *eodem statu* and *in eodem statu esse, manere* may be said. **393** *longos* = longinquos: Servius Aen. XI 544, quoted by Forc., 'Sallustius *et Metello procul agente longa spes auxiliorum*'; [auct. bell. Afr. 51 6 *aquatione enim longa et angusta utebatur*.] **394** *suo..corpore claro*: I 38 *tuo recubantem corpore sancto*; 413 *meo diti de pectore*; II 102 *suis perplexis figuris*; 730 *meo dulci labore*; V 876 *suis fatalibus vinclis*; VI 417 *suasque praeclaras sedes*; 618 *suis radiis ardentibus*: the usage is archaic; as Ennius ann. 52 *aegro cum corde meo*, 55 *Teque, pater Tiberine, tuo cum flumine sancto*; Virg. follows with *suo tristi cum corde, tuo perfusi flumine sacro, suo cum gurgite flavo*. **397** the constr. seems to resemble some of the instances given in n. to I 15: the *Extantis...montis* is joined by attraction with *inter quos* because it is nearest: if the *inter quos* preceded the *montis* there would be nothing harsh or unusual in the constr.; but the *Extantis* cet. is put first to give it emphasis: it is an anacoluthon, but a natural one, as on beginning he had not determined what should be the end of the sentence; and not so harsh as de fin. III 11 *ceterae philosophorum disciplinae, omnino alia magis alia, sed tamen omnes, quae rem ullam virtutis expertem aut in bonis aut in malis numerent, eas non modo nihil adiuvare arbitror*: the corrections of Lach. and others are weak and improbable. **404** *iubar* i.e. solis: V 697 *tremulum iubar haesitat ignis*; Aetna 333 *Purpureoque rubens surgat iubar aureus ostro*: Apuleius by four different imitations shews he understood Aen. IV 130 *iubare exorto* of the sun. **409** Festus p. 375 *veruta pila dicuntur quod..habeant praefixa* (Paulus supplies *quod veluti verua habent praefixa*) *Ennius li.* X cursus quingentos saepe veruti; Virgil and Tibullus have the form *veru*, and Virg. the adj. *verutus*.

414 *At conlectus*, 436 *At maris*, 447 *At si*: *at* here = denique; as also 998 *At consueta*, 1007 *At variae*; 1165, 1168, V 650, 1028, 1361, 1379, 1436: this use of *at* in transitions is common enough in Cicero; see Mayor's edition of Halm Phil. II 7. *conlectus aquae*: III 198 *lapidum conlectum*; Aetna 294 *Pellit opus collectus aquae*: Forc. cites from Frontinus *si collectus pluvialis aquae* cet. *digitum non altior unum*; very similar is Livy XXI 61 10 *raro umquam nix minus quattuor pedes alta iacuit*, [and auct. bell. Afr. 15 1 *nequis miles ab signis* IV *pedes longius procederet*:] but the law is usually restricted to *plus minus amplius maior minor*: Virg. ecl. III 105 *Tris pateat caeli spatium non amplius ulnas*. **416 417** Il. Θ 16 and Hes. theog. 720, had made this notion familiar to poets, though perhaps Virg. geor. II 291 and Aen. VI 577 was also thinking of Lucr., *despectum..patet* suggesting *patet..suspectus*.
416 *inpete* here denotes simply size, which seems to be derived from the primary meaning of force and vehemence: so V 200 *quantum caeli tegit impetus ingens*, for there seems no allusion there to a revolving heaven; and VI 186 *Extructis aliis alias super impete miro*; V 913 *tanto membrorum esse impete natum* seems to express both force and size: Caes. de bel. Gall. III 8 *in magno impetu maris atque aperto*, compared with 9 7 *in vastissimo atque apertissimo oceano* and 12 5 *vasto atque aperto mari*, extent seems to be the chief notion expressed: Mela III 6 *Lusitania trans*

Anam...primum ingenti impetu in altum abit; Stat. silv. IV 2 23 *effusaeque impetus aulae Liberior campi.* **417** *caeli . . hiatus*, perhaps with reference to Ennius' *caeli palatum* after the Greek. **418** I now think that *caelum* must be corrupt: for which we should perhaps read *volucrum*, or *atque avium*, or the like: comp. his *corpora volantum*, and *pennipotentum*: the birds seen flying about among the clouds would be a striking object: Aen. V 512 *Illa notos atque atra volans in nubila fugit... Iam vacuo laetam caelo speculatus et alis Plaudentem nigra figit sub nube columbam. Decidit exanimis vitamque reliquit in astris Aetheriis*; III 243; XII 256 *penitusque in nubila fugit.* **419** *mirando*, because it is wondrous strange that heaven should be there in that small puddle: VI 692 *mirando pondere saxa*; V 1171 *mirando corporis auctu.* See notes 1 and 2 to IV 213. Shelley in the Recollection 'We paused beside the pools that lie Under the forest bough: Each seemed as 'twere a little sky Gulfed in a world below; A firmament of purple light, Which in the dark earth lay...In which the lovely forests grew, As in the upper air...There lay the glade and neighbouring lawn, And through the dark green wood The white sun twinkling like the dawn Out of a speckled cloud.' **426** *ductu*: Cic. de rep. II 11 *cuius is est tractus ductusque muri*; Manil. II 287 *at quae divisa quaternis Partibus aequali laterum sunt condita ductu*; 274 *In tris aequalis discurrit linea ductus*; German. 237 *Tris illi laterum ductus*; Lucan IV 419 *insolito contexunt robora ductu.* **427** *in perpetuum*: Plaut. most. 146 *non videor mihi Sarcire posse aedis meas quin totae perpetuae ruant*; Creech compares Aen. VII 176 *perpetuis soliti patres considere mensis*; VIII 183 Virgil translates by *Perpetui tergo bovis* Homer's νώτοισι διηνεκέεσσι: but these all give the primary meaning of the word. **429** *trahit fastigia*, poetically making the colonnade the agent; instead of *trahitur in fastigia.* **436** *clauda*: Livy XXXVII 24 6 has *claudas mutilatasque naves*; but here perhaps *clauda* is rather the reverse of *recta*, as *claudicat* in 515 *libella si . . claudicat hilum*, VI 1107 *qua mundi claudicat axis.* **437** *aplustris*: see n. to II 555. **438** *rorem salis*: Virg. geor. IV 431 *rorem amarum*, Aen. I 35 *spumas salis*, X 214 *campos salis*: see also n. to I 496. **450** *florentia*: I 900 *flammai fulserunt flore coorto*; 'Tertull. apol. 11 *lumina floruisse*' J. E. M.: Oehler there cites de patient. 2 *florem lucis huius*; adv. Marcion. IV 42 *caelum luminibus floruisset*: comp. Aen. VII 804 *florentis aere catervas*, where Servius says 'Ennius et Lucretius *florens* dicunt omne quod nitidum est'; he then quotes inaccurately V 1442 *florebat puppibus.* **451** *Binaque . . geminare*: 274 *duplici geminoque fit aere.* *geminare* neut. as the compound *ingemino* so often is. **453** *sopore Somnus*: III 431 *in somnis sopiti.* **458** *Concl. loco*: Hor. sat. I 4 76 *Suave locus voci resonat conclusus.* **459** *Mutare* = ἀμείβειν: Sen. epist. 104 8 *quid prodest mare traicere et urbes mutare?*; Pliny II 132 *locum ex loco mutans rapida vertigine.* **460** *severa*: V 1190 *noctis signa severa*: the epithet

seems to belong to the notion of night: it appears to be the opposite to what is gay and smiling: Ov. met. VII 184 has *mediae per muta silentia noctis.* **462** comp. 590 *Cetera de genere hoc monstra ac portenta loquontur...ideo iactant miracula dictis*; and V 845. **463** *violare fidem* usually means to break your own faith; here it means to impair the credit of others: but 505 *Et violare fidem primam et convellere tota Fundamenta*, the sense is much the same as here: I 694 *Et labefactat eos* i.e. sensus *unde omnia credita pendent.* **464** foll. Tertull. de anima 17 *non enim sensum mentiri sed opinionem: sensum enim pati, non opinari; animam enim opinari.* **465** *opinatus* seems a ἅπαξ λεγόμ. for *opinatio*: with *opinatus animi quos addimus ipsi*, and **467** *res secernere apertas Ab dubiis, animus quas ab se protinus addit* comp. Epic. himself in Diog. X 50 τὸ δὲ ψεῦδος καὶ τὸ διημαρτημένον ἐν τῷ προσδοξαζομένῳ ἀεί ἐστι κατὰ τὴν κίνησιν ἐν ἡμῖν αὐτοῖς, συνημμένην τῇ φανταστικῇ ἐπιβολῇ, διάλειψιν (not διάληψιν) δ' ἔχουσαν καθ' ἣν τὸ ψεῦδος γίνεται: and comp. all that follows with Sextus adv. math. VII 210 foll.: Epicurus shews that every perception is true; but that some opinions are true, some false, and points out how the true are to be distinguished from the false; Cic. acad. pr. II 45 *dixitque* (Epicurus) *sapientis esse opinionem a perspicuitate seiungere*: *perspicuitas* is his translation of Epicurus' ἐνάργεια. With respect to one of the cases put by Lucr. above, Cic. l. l. 80 says *Timagoras epicureus negat sibi umquam, cum oculum torsisset, duas ex lucerna flammulas esse visas; opinionis enim esse mendacium, non oculorum.* It appears from this book of Cicero that the ship of 387 foll. and the bent oar of 438 were also stock illustrations in the schools: Macrob. sat. VII 14 enumerates others as well as these. **468** *ab se*=ipse: 465 *addimus ipsi*: nearly the same is its force III 271 *initum motus ab se quae dividit ollis*; Plaut. miles 940 *dat nunc ab se mulier operam*; trin. 182 *a me argentum dedi*; and *a se fecit* in an inscr. Zell. epigr. 1011.

469—521: if a man teaches that nothing can be known, how does he know that? how distinguish between knowing and not knowing? on the truth of the senses all reasoning depends, which must be false if they are false: nor is one sense more certain than another; all being equally true; nor is the same sense at one time more certain than at another: all reasoning, nay life itself would at once come to an end, if the senses are not to be trusted; as in any building, if the rule and square are wry, every part will be crooked and unstable, so all reasoning must be false, if the senses on which it is grounded are false. **469** *nil sciri* cet. refers no doubt to the academical philosophy which as said in Cic. acad. pr. II 61 *confundit vera cum falsis, spoliat nos iudicio, privat adprobatione, omnibus orbat sensibus*: comp. too Macrob. sat. VII 14 20 where the preceding illustrations of Lucr. are referred to, *quae academicis damnandorum sensuum occasionem dederunt.* But in Cic. l. l. 75 it is also said of Chrysippus, *qui fulcire putatur porticum stoicorum, quam multa ille*

contra sensus cet. so that Lucr. may well be alluding to his paradoxes. *id quoque nescit* cet.: Metrodorus of Chios a great admirer of Democritus pushed the paradox to this extreme: Cic. l. l. 73 says of him *initio libri qui est de natura 'nego' inquit 'scire nos sciamusne aliquid an nihil sciamus, ne id ipsum quidem, nescire aut scire, scire nos, nec omnino sitne aliquid an nihil sit'*: the original is quoted by Sextus and Eusebius. **471** *mittam*=omittam: III 961 *mitte*, VI 1056 *mirari mitte.* *contendere causam* is not easy to explain: Lamb. compares Cic. in Catil. II 25 *causas ipsas, quae inter se confligunt, contendere*; but there *contendere* is simply to compare together, as in pro Sex. Rosc. 93: a sense scarcely suitable here; unless the words can mean 'contendere meam causam cum illius omittam': Gronov. obs. III 19 compares it with *cernere vitam, cernere bellum, pugnare pugnam* and the like; and this is probably right: it will therefore=contendere et agere causam; cum contentione agere causam. *causans* for *causam* would be an easy emendation. **472** *Qui capite* cet. appears to be a proverb: Plaut. curc. 287 *Quin cadat, quin capite sistat in via de semita*; Ter. ad. 316 *Sublimem medium arriperem et capite in terram statuerem*: but its precise force is not very clear: Gronov. l. l. explains it by 'qui sibi non constat, qui se ipse evertit, qui cernuat': this would suit the context; but a man who tumbles on his head, does not place his head where his feet were. Perhaps by a man putting his head where his feet should be is meant that he assumes as his premiss that nothing can be known, which is the conclusion that ought to be, but cannot be proved by such a premiss: the man thus inverts himself in a manner. Locke essay IV 11 3 uses very similar language, 'I think nobody can in earnest be so sceptical as to be uncertain of the existence of those things which he sees and feels. At least he that can doubt so far, whatever he may have with his own thoughts, will never have any controversy with me; since he can never be sure I say anything contrary to his opinion', and 8 'if all be a dream, then he doth but dream that he makes the question; and so it is not much matter that a waking man should answer him.'

478 *Invenies*: whatever he may say, you will find that no other real answer can be given, except that all truth depends first on the senses. *primis*: comp. II 1080 and III 250. **484** *quae tota* cet.: I 694 *unde omnia credita pendent.* **493** *coniuncta*: I 449 *aut his coniuncta duabus Rebus ea invenies*: and see n. there: it would then mean here the conditions, of light etc., which are necessarily connected with colour; but this can hardly be right: it is rather to be compared with II 742 *cognoscant corpora tactu Ex ineunte aevo nullo coniuncta colore*; and means simply 'and so see the objects which are seen by colour': anyhow the phrase is curious. **497** *ipsi repr. sese* i.e. the same sense at one time cannot refute the same sense at another: Cic. acad. pr. II 79 *eo enim rem demittit Epicurus, si unus sensus semel in vita mentitus sit, nulli umquam esse credendum*; and with all that precedes comp. the very similar reasoning of Epic. himself in Diog. X 31 πᾶσα γὰρ αἴσθησις ἄλογός ἐστι καὶ μνήμης οὐδεμιᾶς δεκτική· οὔτε γὰρ ὑφ' αὑτῆς οὔθ' ὑφ' ἑτέρου κινηθεῖσα δύναταί τι προσθεῖναι ἢ ἀφελεῖν οὐδ' ἐστὶ τὸ δυνάμενον αὐτὰς διελέγξαι. οὔτε γὰρ ἡ ὁμοιογενὴς αἴσθησις τὴν ὁμοιογενῆ διὰ τὴν ἰσοσθένειαν, οὔθ' ἡ ἀνομοιογενὴς τὴν ἀνομοιογενῆ· οὐ γὰρ τῶν αὐτῶν εἰσὶ κριτικαί. οὔθ' ἡ ἑτέρα τὴν ἑτέραν· πάσαις γὰρ προσέχομεν. οὔτε μὴν λόγος· πᾶς γὰρ λόγος ἀπὸ τῶν αἰσθήσεων ἤρτηται. **500** *dissolvere* is a technical term often used by Cicero and Quintilian; and means to explain away an objection and prove it not to be to the point. **502** *rat. eg.*: *rationis egentes* occurs in Ovid met. XV 150 amid many other imitations of Lucretian language. **504** the antithesis between *manifesta* and *manibus emittere* is doubtless intentional. **505** *viol. fid.*: see n. to 463. **507** *Non modo..., vita quoque ipsa*: the absence of the adversative particle in the second clause is rare in the Latin, though so common in the English idiom: Tacitus has *non modo, etiam* more than once, and hist. II 27 *nec solum apud Caecinam..., Fabii quoque Valentis copiae*: Livy XXVIII 39 11 *ita bello afflixit ut non modo nobis, absit verbo invidia, ne posteris quidem timenda nostris esset*, Madvig inserts from conjecture *sed* after *nobis*: Sen. epist. 77 6 *mori velle non tantum prudens..., etiam fastidiosus potest*, [and 85 33 *non ex ebore tantum Phidias sciebat facere simulacra, faciebat ex aere*;] Mela III 27 *nandi non patientia tantum illis, studium etiam est.* Such sentences as Livy XXII 27 9 *nec se tempora aut dies imperii cum eo, exercitum divisurum*; I 25 3 *nec his nec illis periculum suum, publicum imperium servitiumque obversatur animo*, seem like in principle. **508** *nisi credere* cet.: Locke essay IV 11 8 'such an assurance of the existence of things without us is sufficient to direct us in the attaining the good and avoiding the evil which is caused by them etc.' *ausis*=velis; as often in Plautus: Men. 697 *etiamne audes mea reverti gratia?*; truc. II 4 71 *Non audes aliquod dare mihi munusculum?*: comp. *sodes* and *sis.* [See Ussing to Plaut. asin. 473, and comp. Cic. epist. IX 10 1 *non sum ausus Salvio nostro nihil ad te litterarum dare.*] **515** *libella* 'consists of two sides joined at the top by a cross bar, over which a line and plummet descends as a pendulum' Rich's companion. *claudicat*: see n. to 436. **517** the rhythm of this v. was perhaps suggested by Il. Ψ 116 Πολλὰ δ' ἄναντα κάταντα πάραντά τε δόχμιά τ' ἦλθον, on which Demetrius Phal. cited by Clarke remarks μεμίμηται τῇ κακοφωνίᾳ τὴν ἀνωμαλίαν. **518** *quaedam vid. velle, ruantque* i.e. ut alia videantur velle ruere, alia autem ruant, prodita et haec et illa cet.: comp. 652 *Esse minora igitur quaedam maioraque debent*; V 1237 *Concussaeque cadunt urbes dubiaeque minantur.* *vid. velle*: III 577 *videtur Ire anima ac toto solui de corpore velle.* **520** *igitur* beginning an apodosis: see n. to I 419. *ratio* cet.: πᾶς γὰρ λόγος ἀπὸ τῶν αἰσθήσεων ἤρτηται, says Epic. in Diog. X 32.

522—548: the way in which the other senses are acted upon, may now be easily understood: sound is corporeal, since it is by striking on the ear that it excites sensation; often too the atoms of sound in passing through the narrow windpipe graze it and make it rough; again a long speech spoken in a loud voice takes much strength and substance from a man: smoothness of sound comes from smoothness of its atoms, roughness from roughness in them. **522** *quo pacto*: 'that is manifestly by impulse, the only way which we can conceive bodies operate in' says Locke essay II 8 11: what follows has many points of singular agreement with what Lucr. says here and in parts of II. **523** *scruposa*: the metaphor is obvious, though the word does not appear to occur elsewhere in this sense; and *scrupeus* has also this meaning, but only in late writers. **524** foll. comp. auctor ad Heren. III 21. **524** *auditur* cet.: so Epic. in Diog. X 52 τὸ ἀκούειν γίνεται ῥεύματός τινος φερομένου ἀπὸ τοῦ φωνοῦντος ἢ ἠχοῦντος ἢ ψοφοῦντος ἢ ὅπως δήποτ' ἀκουστικὸν πάθος παρασκευάζοντος. τὸ δὲ ῥεῦμα τοῦτο εἰς ὁμοιομερεῖς ὄγκους διασπείρεται κ.τ.λ. **525** *pepulere..sensum*: Cic. de nat. deor. II 144 *priusquam sensus ab his* i.e. vocibus *pulsus esset*. **529** *arteria*: this neut. form appears to occur only here. *asperiora*, perhaps with reference to its technical name, the *aspera arteria*, τραχεῖα ἀρτηρία: see Cicero and Celsus in Forc. **530** *coorta* is neut. plur.; as it appears to be also in VI 465: comp. Livy V 12 7 *seditio intestina maiore mole coortă*: but VI 511 *turba maiore coacta*, *coacta* must be abl. **532** *quoque* belongs equally to the three words *expleti ianua oris*; for the meaning is *os quoque expletur et eius ianua raditur*: the *ianua* here is the *fauces*, through which the voice enters the mouth. *expleti*: VI 1203 *sanguis expletis naribus ibat*: the word in these two places has doubtless its usual meaning, though Lach. says the sense which Donatus and Ennius give it of *exinanitus* would be appropriate here. **534** *laedere*: auctor ad Heren. III 21 *laeduntur arteriae si, antequam leni voce permulsae sunt, acri clamore compleantur*. **535** *corporis*: see n. to I 1039. **545** *sub murmure*: 785 *Omnia sub verbone creat natura*: *sub* here, as often, signifies 'at' 'immediately upon', and sometimes has the same force as the simple abl.: comp. VI 413 and 416 *uno sub tempore* and n. there: Livy II 55 1 *sub hac pessimi exempli victoria delectus edicitur*; Ov. met. IV 523 *Bacchi sub nomine Iuno Risit*; Manil. I 147 *sub origine rerum*; Hor. od. III 7 30 *Sub cantu querulae despice tibiae*; Celsus V 26 31 *sub frigido sudore moriuntur*; [Caes. b. civ. I 27 3 *sub ipsa profectione*; Hirt. b. Gall. VIII 49 2 *sub discesso suo*; Nepos Attic. 12 3 *quod quidem sub ipsa proscriptione perillustre fuit*; and perhaps Sen. rhet. suas. VII 11 *mortem sub infamia quaerere*.] The accus. is more common: Ov. fasti III 642 *Sub verbum querulas impulit aura fores*; [Caelius ap. Cic. epist. VIII 4 4 *statim sub mentionem et convicium obtrectatorum*; Cic. epist. X 16 1 *sub eas statim recitatae sunt tuae*; ad Q. fr. II 1 1 *mense Decembri*

sub dies festos;] and *sub haec*, *sub haec dicta*, *sub hanc vocem*, so frequent in Livy: [see Draeger hist. synt. I p. 619 I g for abl., and 2 c for accus.] *mugit*: Aen. VIII 526 *Tyrrhenusque tubae mugire.. clangor*. **546** *cita* i.e. murmure: 608 *sonituque cientur* i.e. loca; V 1251 *canibusque ciere*. **547** whoever has travelled over Helicon and seen and heard its rushing torrents, will feel the fitness of making them the haunts of swans; and he who has not visited the place, might well believe that they would come to sing their dirge after having, in the words of Helicon's own poet, λοεσσάμενοι τέρενα χρόα Περμησσοῖο Ἠ ἵππου κρήνης ἢ Ὀλμειοῦ ζαθέοιο: the reading of course is not certain here or in 546, where the archetype was injured, as here, in the middle of the v.; but *cucnei torrentib.* when some letters were damaged, might easily get to *necti* (or *nete*) *tortis*.

549—594: as the sounds are coming out, the tongue forms them into articulate words; every one of which is distinctly heard near at hand; but at a greater distance the sound is indistinctly perceived, as it gets broken in passing through the air: again a single word often strikes the ears of a whole multitude; it must divide therefore into so many distinct words: often too voices are echoed distinctly back, sometimes six or seven in answer to one: these the wonder-loving multitude believes to be the voices and music of nymphs and woodland gods, Pan and the rest. **550** *recto ore*: see n. to II 217 and 226. **551** *articulat*: Plat. Protag. 322 A φωνὴν καὶ ὀνόματα ταχὺ διηρθρώσατο τῇ τέχνῃ: lexicons cite for the Latin word only late authorities besides Lucr.: Cic. de nat. deor. II 149 quoted by Lamb. *in ore sita lingua est, finita dentibus. ea vocem inmoderate profusam fingit et terminat atque sonos vocis distinctos et pressos efficit.* *verborum daedala*: it governs a gen. also V 234 *naturaque daedala rerum*: comp. too n. to I 7. **552** *Formatura*, **556** *formaturam*: see n. to I 653. **553** *Hoc ubi*: so 622, 658, VI 274: IV 1092 *quoniam, Hoc*: see n. to III 531. *una pr. Per v. quaeque*: V 990 *Unus enim tum quisque*. **556** *Servat* cet.: Epic. l. l. τὸ δὲ ῥεῦμα τοῦτο εἰς ὁμοιομερεῖς ὄγκους διασπείρεται, ἅμα τινὰ διασώζοντας συμπάθειαν πρὸς ἀλλήλους καὶ ἑνότητα ἰδιότροπον. *formaturam* and *figuram* must surely be synon. here. **560** *illam...ver. sen. quae sit*: see n. to I 15. **567** *Obsignans* seems to mean impressing on the ears the form of the word, as the seal impresses its mark on the wax. **568** *auris incidit*, a rare construction: Tac. hist. III 29 *obruitque quos inciderat*; Marcus Aurel. rescr. ap. Vulc. Gallic. vit. Avid. Cass. 2 *ipse sponte..fatales laqueos inciderit*; Paulus quoted by Lach. has the accus. and Apul. more than once; Aen. IX 721 *animos deus incidit* M, but most mss. *animo*; in Livy there appears to be no ms. authority for the accus.: I 326 *mare quae inpendent*, where see note; Lucil. ap. Non. p. 502 *gladium incumbat*: and so *insinuare latebras* and the like. **572** *videas, possis*: see n. to I 327. **575** *opacos* seems to mean here

enveloped in darkness; as Aen. III 508 *Sol ruit interea et montes umbrantur opaci*; though it may only mean that they are lost in the woods on the hills. **576** *Quaerimus et* cet.: Aen. III 68 *Condimus et magna supremum voce ciemus*; this might be added to n. to I 253. **578** *ipsi* seems to be in answer, with reference to *Unam cum iaceres*. **579** *docta referri*: Lach. compares Hor. epist. I 14 30 *Multa mole docendus aprico parcere campo*. **580** *Haec loca* cet.: Milton par. reg. II 296 *to a superstitious eye the haunt Of wood-gods and wood-nymphs*; Aen. VIII 314 *Haec nemora indigenae fauni nymphaeque tenebant*. **581** *faunos*: these old Italian, nay peculiarly Latin gods he joins with Greek satyrs and nymphs and Pan, as Virg. l. l. and geor. I 10 *faunique...dryadesque*; to which v. Probus says *rusticis persuasum est incolentibus eam partem Italiae quae suburbana est saepe eos* i.e. faunos *in agris conspici*; and Varro tells us it was in the saturnian metre they spoke *in silvestribus locis*; as does Ennius ann. 222 *Vorsibus quos olim faunei vatesque canebant*: but Ovid and Horace likewise join the fauns with the nymphs and satyrs; and the latter, od. I 17 1, even brings *Faunus* from Lycaeus to Lucretilis. *esse locuntur*: not a common constr. but occurring in Virg. ecl. V 27; Aen. I 731; Hor. epist. I 20 21; Tib. I 5 1; Ov. rem. 647; her. 16 259; fasti VI 3; Sen. epist. 58 22; Nepos VII 7; even Cicero ad Att. I 5 6, [and XVI 10 1: *mecum loqui* with the infinitive occurs epist. ad fam. VI 8 1, XIII 28 a 1: so XII 5 1 *loquebantur omnes...in Syria te esse, habere copias* cet.; Q. Cic. de pet. 50 *bene te ut homines nosse—appellare—petere—esse et loquantur et existiment*; Mart. IV 61 10 *loquebaris Hereditatis tibi trecenta venisse*.] **582** foll. Mart. IX 61 11 *Saepe sub hac madidi luserunt arbore fauni, Terruit et tacitam fistula sera domum*; and see what follows. **583** *taciturna silentia* is found in Ovid ars II 505; and *muta silentia* occurs thrice in his met.; Aen. II 255 *tacitae per amica silentia lunae*. **585** *Tibia*: Rich in his companion gives a drawing of a simple pipe or flageolet from the statue of a faun, exactly resembling that now used by the Roman *pifferari*, to whom it has doubtless come down in uninterrupted succession from antiquity. **587** *capitis velamina*: I 930 and IV 5 *Unde prius nulli velarint tempora musae*: Ov. her. 5 137 *Cornigerumque caput pinu praecinctus acuta Faunus*. **588** *Unco* cet.: V 1407 *Et supera calamos unco percurrere labro*: Prop. III (IV) 17 34 *Capripedes calamo Panes hiante canent*. **589** *silvestrem...musam* is in Virg. ecl. I 2. **594** *avid. auric.*, 'avet captare auriculas alienas': Pers. I 22 *Tun, vetule, auriculis alienis colligis escas*; II 29 *qua tu mercede deorum Emeris auriculas*; Mart. XIV 142 *Si recitaturus dedero tibi forte libellum, Hoc focale tuas asserat auriculas*, against a too greedy reciter: comp. *aures dare, donare, praebere, commodare*: Lucr. himself *attentas auris reposco*.

595—614: sounds will come through places, through which you cannot see, because their particles can pass by crooked ways, while images can only travel through straight passages: again one voice bursts into many similar voices, as a spark of fire into many sparks; so that all the corners of a building may be filled with sound; but even sound is deadened and broken in coming through such obstructions. **598** *Conloquium* cet.: see notes I: there is in this a mixture of seeing and hearing, exactly as in Hor. sat. II 8 77 *tum in lecto quoque videres Stridere secreta divisos aure susurros*: quite as harsh or harsher is 262 *fierique perinde videmus Corpore tum plagas in nostro*; I 256 *avibus canere undique silvas* (videmus): Aen. IV 490 *mugire videbis Sub pedibus terram*; Prop. II (III) 16 49 *Vidistis toto sonitus percurrere caelo*; Varro Atac. ap. Victorin. 2503 *Vidit et aetherio mundum torquerier axe Et septem aeternis sonitum dare vocibus orbes*. **600** *renutant* seems to occur in no other writer of authority. **602** *vitrei*; see n. to III 97; probably its confusion with the adjective has saved the *ei* here: for the sense comp. 147 and 152. **605** *Dissuluit*: see n. to III 1031 *lucunas*. **606** *suos in ignis*: i.e. vicissim in plurimas ignis scintillulas; as is seen especially in sparks from a wood fire. **607** *abdita retro*: though hidden away from the sight, they are filled with the sounds which circle all about them. *retro*: Sen. Hipp. 93 *per altas invii retro lacus Vadit tenebras*; Stat. Theb. II 13 *ipsaque tellus Miratur patuisse retro*; Aetna 140. **608** *fervunt*: for form and meaning see notes I and n. to II 41. *cientur*: 546 *regio cita*. [With this and the previous line compare Lucil. XXX 48 *Omnia tum endo muco* (μυχῷ) *videas fervente micare*.] **609** *derectis*: see n. to VI 823 *derigit*. **611** *at* cet. i.e. nemo non potest, understood from *nemo* in 610: see n. to II 1038: *Saepem ultra*, which I at once hit upon myself before I saw Bernays' ed., seems to me to suit the sense far better than other readings; and also to be nearer the mss.: *m*, as often, became *s*; then with *saepesupra* for *saepesultra*, comp. I 846 *illis iura* for *illi supra*.

615—632: taste is quite as easy to explain; the flavour is pressed out from food by chewing and passes into the pores of tongue and palate: the flavour is pleasant, if its atoms are smooth, but the contrary, if these are rough: when the food has got below the palate, the flavour is no longer perceived, and the food is then indifferent, if only it can be digested. **615** *qui*: see n. to V 233. **619** *coëpit*: neither Ritschl pref. to trinummus p. LXXVI nor Lach. can find another certain example of this trisyll. use: but the latter says of the former 'quod hanc formam rationem habere negat, mihi non persuadet; nam ab *apiendo* ut fit *copula*, ita *coïpere coëpisse coëptum*, e quibus *coepisse* non minus recte quam cetera contrahi potuit eo modo quem in *coemisse* notavimus libro II 1061': and there are at least four passages of Plautus where *coëpi* seems well established; as merc. 533 *Ecastor iam bienniumst, quom mecum rem coëpit*, where Ritschl on no authority reads *occeptavit*; the other

passages he has not yet edited. **622** *Hoc ubi* cet.: that this was also the doctrine of Democritus is abundantly shewn in Theophr. de sensu et sensil. 65, 66, 67 and elsewhere. **624** *Umida sudantia* is very Lucretian: comp. *candens lacteus, candens lucidus*; and esp. 212 *serena Sidera ..radiantia*; v 490 *altaque ..fulgentia templa.* *templa*: v 103 *humanum in pectus templaque mentis*: see n. to I 120: the *linguai templa* may have reference to the shape and position of the palate and the Greek οὐρανός. **627** *fine* = tenus, a use illustrated by Bentl. to Hor. od. II 18 30: Neue I p. 222 gives many instances from Caesar, Sallust etc.: I might add others from Plautus, Ovid etc.

633—672: I will now explain why what is one creature's meat is another's poison: all creatures differ within and without; therefore they consist of different atoms; and the atoms being different, the pores and passages of the whole body, and also of the mouth and palate must differ: thus if food is pleasant to one creature, its smooth elements must suit the pores of that creature; if unpleasant, then its rough elements must more readily adapt themselves to them; and thus in disease, what was before sweet to a man may become bitter. **633** *almus*: II 390 *liquor almus aquarum.* **634** *quareve*: see n. to I 57 *Quove.* *triste*: see n. to I 944. **635** *perdulce* appears not to occur elsewhere. **636** *differitas*: see n. to I 653: this however is a most strangely formed word: [it occurs again and again in Arnobius.] **637** *ali* recurs VI 1226 *quod ali dederat*; *alei* is found twice in the corp. inscr. Lat. and *ali* in one doubtful case: see also n. to I 263 *alid.* *fuat* we had already II 383. Democritus taught exactly what Lucr. teaches here: Theophr. de sensu et sensil. 63 σημεῖον δὲ ὡς οὐκ εἰσὶ φύσει τὸ μὴ ταὐτὰ πᾶσι φαίνεσθαι τοῖς ζῴοις, ἀλλ' ὃ ἡμῖν γλυκὺ τοῦτ' ἄλλοις πικρὸν καὶ ἑτέροις ὀξὺ καὶ ἄλλοις δριμὺ τοῖς δὲ στρυφνόν, and 69 ἁπλῶς δὲ τὸ μὲν σχῆμα καθ' αὑτό ἐστι, τὸ δὲ γλυκὺ καὶ ὅλως τὸ αἰσθητὸν πρὸς ἄλλο καὶ ἐν ἄλλοις, ὥς φησιν: G. H. Lewes' physiol. of common life p. 59 'that one man's meat is another man's poison is a proverb of strict veracity'. **638** *serpens*: Pliny VII 15 cited by Lamb., and XXVIII 35 gives similar accounts of the power of human spittle over serpents; and Hardouin illustrates them from various sources. **639** *mand. conf. ipsa*: Lucil. XXX 50 Muell. *conficit ipse comestque.* **640** 'Arnob. I 11 *veratrum venenum est hominibus*' J.E.M. **641** *coturnicibus*: this is confirmed by Hesych.: ἐλλέβορος· βοτάνη ἣν ἐσθίουσιν οἱ ὄρτυγες, which his recent editor strangely alters to ὄρυγες: Galen often mentions the same fact, as de temperam. III 4 at end καὶ τοῖς μὲν ὄρτυξιν ἐλλέβορος τροφὴ τοῖς δ' ἀνθρώποις φάρμακον, almost a translation of Lucr.; Pliny too X 197 *venenis capreae et coturnices, ut diximus, pinguescunt*: v 899 *pinguescere saepe cicuta Barbigeras pecudes, homini quae est acre venenum*; comp. this and VI 970 foll. with Diog. IX 80 καὶ τῇ μὲν αἰγὶ τὸν θαλλὸν εἶναι ἐδώδιμον ἀνθρώπῳ δὲ πικρόν, καὶ τὸ κώνειον ὄρτυγι μὲν

τρόφιμον, ἀνθρώπῳ δὲ θανάσιμον, and Sextus pyrrh. hyp. I 57 τὸ γοῦν κώνειον πιαίνει τοὺς ὄρτυγας, and Lewes l. l. p. 62 'the poisons are food to many, the rabbit devouring belladonna, the goat hemlock, and the horse aconite'. For the quantity of *cōturn.*, see n. to I 360 and III 504: whether the *cocturn.* of A is the genuine spelling or a corruption, I am unable to decide: the former is maintained by Fleckeisen, Rhein. mus. VIII p. 232, and Zeyss, Philolog. XXXI p. 309; the latter by Lach.: which would seem to be the truth, if we can trust the old grammarians, Caper p. 2248, and one in Keil's gramm. Lat. V p. 573 'coturnicem antiqui dixerunt, nunc cocturnix'. **643** *ante*, I 814, 895 and elsewhere. **647** *Ext. mem. circ.* we had above III 219. **651** *ipso* refers to *ore* as well as *palato*, they being singled out from the other *membra*, as those which have to do with taste: comp. 1044 *partis genitalis corporis ipsas*; and VI 1175 *ipso venientes ore patente.* **652** *maioraque* i.e. quaedam maiora: comp. n. to 518: *foramina* is the subject. **654** *multangula* appears to occur in no other writer of a good age. **660** *contractabiliter* too seems a ἅπαξ λεγόμ.: *a*, as twice in *contractans.* **668** *corpora* i.e. the *levissima* of 659. **669** *cetera*: *Aspera nimirum hamataque* of 662. **671** Lachmann's note is quite beside the point: he gains nothing by transposing these vss.; for, as just shewn, the *quae corpora* of 668 and the *cetera* of 669 are the very *levissima* and *Aspera* respectively, for which he makes his transposition. I now incline to reject also Bernays' notion of a lacuna: the mention of honey is somewhat abrupt; but that is explained by the fact that it was proverbial as an illustration of the merely relative notion of sweet and bitter: thus Sextus pyrrh. hyp. II 63 ἐκ τοῦ τὸ μέλι τοῖσδε μὲν πικρὸν τοῖσδε δὲ γλυκὺ φαίνεσθαι ὁ μὲν Δημόκριτος ἔφη μήτε γλυκὺ αὐτὸ εἶναι μήτε πικρόν, ὁ δὲ Ἡράκλειτος ἀμφότερα. Now Lucr. has just specified fever with a flow of bile as the cause of this change of sweet to bitter: with this comp. Galen de simpl. med. temp. IV 17 οὐδὲν οὖν θαυμαστον οὐδὲ διὰ τί τὸ γλυκύτατον ἁπάντων μέλι τὸν πικρότατον γεννᾷ χυμὸν καὶ διὰ τί μάλιστα τοῖς ἀκμάζουσί τε καὶ φύσει θερμοῖς καὶ πυρέττουσιν...ὅταν ἀκραιφνεῖ πλησιάζῃ θερμότητι, τὸν χολώδη γεννᾷ χυμόν: comp. too Sen. epist. 109 7. Lucr. probably got his illustration from Hippocrates. **672** *supera saepe* in II and III: comp. II 391—407 with III 189—195, from which it will appear that honey has many smooth round atoms in it whence it gets its usually pleasant flavour; but at the same time it has a *constantior natura Et pigri latices magis et cunctantior actus* than water, and therefore has more rough and hooked atoms; so that in peculiar states of the tongue and palate, in fever for instance, these latter atoms happen to fit the pores better than the smooth ones, and produce a bitter flavour.

673—686: next to explain smell: it must stream on all sides from many things; but, as in taste, one kind suits one creature, another another; bees are attracted from far by the smell of honey, and so on;

thus each creature is drawn to its proper food and avoids poison. 673 *adiectus*: this rare word is similarly used I 689 *nostros adiectu tangere tactus.* 674 *primam* cet.: so Epic. in Diog. Laert. x 53 καὶ μὴν καὶ τὴν ὀσμὴν νομιστέον ὥσπερ καὶ τὴν ἀκοὴν οὐκ ἄν ποτε πάθος οὐθὲν ἐργάσασθαι, εἰ μὴ ὄγκοι τινὲς ἦσαν ἀπὸ τοῦ πράγματος ἀποφερόμενοι σύμμετροι πρὸς τὸ τοῦτο τὸ αἰσθητήριον κινεῖν κ.τ.λ.: comp. too Locke essay II 8 13. 675 notice *fluens, fluctus, fluere* employed with his usual indifference to such repetitions. 681 *quo tulerit* i.e. quocumque tulerit. *promissa* of mss. is well defended by N. P. Howard, Journ. of phil. I p. 131: in answer to Lachmann's 'animata et vigentia non videntur *promitti* aut se promittere' he appositely cites Nemes. cyneg. 269 *promissi spatiosa per aequora campi*, said of horses: comp. too Pliny XVI 107 *nec ulla arborum avidius se promittit.* *pro. can. vis*: VI 1222 *fida canum vis*; III 8 *fortis equi vis*; Aen. IV 132 *odora canum vis.* 684 *nidor*: not only is *nidor* used here and elsewhere for *odor*, but VI 987 he has *nidoris odores*.

687—705: one smell will travel farther than another, but none so far as sound; I need not add as the images which excite sight; for it travels slowly and is soon lost, because it comes with much ado from the inmost parts of things, as proved by this that things when pounded or dissolved by fire smell more strongly: the atoms too of smell are greater than those of voice, since often a wall will stop the one and not the other; and thus too dogs often lose the scent. 688 *alio, alter*: *alter* thus used for *alius*, though unusual, recurs V 835 *ex alio terram alter* thus used... *status excipit alter*: just before, 829, he had said *Ex alioque alius status excipere*: so Cic. de rep. (somn. Scip.) VI 12 *uterque plenus alter altera de causa habetur*: *alius* for *alter* is more common: inscr. Lat. I 1007 *Gnatos duos creavit*: *horunc alterum In terra linquit, alium sub terra locat*; Sen. epist. 94 43 *Ab alio expectes, alteri quod feceris*; [Val. Flacc. I 833 *quarum altera...Ast aliam* cet.;] Livy I 25 5 *duo Romani super alium alius.. corruerunt*; Tac. ann. IV 48; Pliny more than once: Plaut. capt. 8 *alium* for *alterum* is only conjecture; but argum. 2 and 9 *alium*=alterum. *permitti*=promissa of 681: see Gronov. obs. II 13 p. 316 and Forc. 689 *quisquam* in the masc. thus applied to an inanimate thing seems as rare, as its use as an adj. agreeing with an abstract subst. illustrated at I 1077 *quisquam locus.* 693 *facilis* seems here to mean readily absorbing the scent, a sense not very different from the common one 'readily yielding'. 699 *quam vox*: see n. to III 456 *ceu fumus*: this constr. being so common, it is curious that two of the greatest Latin scholars of modern times should have found fault with it: Lamb. says here 'Latine dici non potest *videre licet odorem maioribus principiis constare quam vox*'; and Madvig. opusc. pr. p. 312 makes a like objection to III 614 *ut anguis*: 'you might have said *three*; for Bentl. in III 456 alters *fumus*' J. E. M. 704 *calida* is joined with

decurrunt. *nuntia*: 1032 *simulacra.. nuntia praeclari voltus*; VI 76 *simulacra feruntur.. divinae nuntia formae.* [Nonius p. 215 9 '*nuntius*: neutri apud aliquos non receptae auctoritatis lectum est, sed doctos'.]

706—721: but in the case of the form and colours of things, as well as smells and tastes, some are suited to one creature, unsuited to another: thus for example the lion fierce as he is cannot face the cock. 706 *hoc* refers of course to the argument which ended with 686, that the particles of a thing which excite taste and smell will often fit one creature, not another. It is hardly possible then to contest what Lach. says, that this is another of the passages added by Lucr. and not properly connected with the rest of the poem. 710 *explaudentibus* must mean driving off the night with their noise, as an actor is driven off the stage. 713 *mem. fugai*: Livy XLI 3 4 *si belli hostes meminissent*; 4 4 *Histrorum pauci.. memores fuerunt fugae*: comp. Homer's μνησώμεθα χάρμης and the like: not unlike is 153 *quam meminit levor praestare salutem*; and Virg. geor. I 400; but there and ecl. VIII 88, borrowed from Varius, the negative is introduced; as well as Livy x 29 2 *nec pugnae meminisse nec fugae*; Ov. met. VII 545 *Non aper irasci meminit*; Ael. hist. an. XI 12 φυγῆς οὐδέν τι μέμνηται.—Pliny twice mentions what is here asserted of the lion, VIII 52 and x 48; Aelian four times; Plutarch and others refer to it. Martha, p. 258, says that some one, Cuvier he believes, put a cock into a lion's den: the lion went up to his bugbear and ate him. 716 *interfodiunt*: 'the idea of *through*...is often found with *inter* in Lucr., as IV 716 *inter-fod-* dig a passage through, VI 333 *inter-fug-* fly through, and IV 868 *inter-datus*, distributed through' Prof. Key in trans. of the philolog. soc.: all these words seem peculiar to Lucr. 719 *illis* seems a certain correction for *ilus* (unless Lucr. could say *ībus* as well as *ĭbus*): 9 times at least he has the dat. *ollis*; once, VI 687, the abl. *ab ollis*, elsewhere abl. *illis*: here on the other hand dat. *illis* which seems to me to sound better with *penetrantibus* than *ollis*.

722—748: the mind too receives its impressions from images flying about on all hands, which however are much finer than those by which we see: images are of different kinds, some formed spontaneously in the air; some coming from things or formed from a union of several; and thus we see centaurs and the like, though such never existed, from the chance union for instance of the image of a man and horse; the extreme fineness of such images makes them readily unite, and the wondrous agility of the mind itself at once receives them.—Lucr. in this and the following sections battles manfully and ingeniously with the prodigious difficulties under which the epicurean theories on this question labour. Cicero's philosophical writings are full of clever argument and banter directed against them, sometimes successful, but often captious and unfair. 724 *rer. sim.*: Plut. de plac. phil. IV 8 Λεύκιππος, Δημόκρι-

τος, τὴν αἴσθησιν καὶ τὴν νόησιν γίνεσθαι εἰδώλων ἔξωθεν προσιόντων: Cic. ad fam. XV 16 thus jests with the new epicurean convert Cassius, *fit enim nescio qui, ut quasi coram adesse videare, cum scribo aliquid ad te; neque id κατ' εἰδώλων φαντασίας, ut dicunt tui amici novi qui putant etiam διανοητικὰς φαντασίας spectris Catianis excitari. nam, te ne fugiat, Catius Insuber epicureus, qui nuper est mortuus, quae ille Gargettius et iam ante Democritus εἴδωλα, hic spectra nominat.* **726** *Tenvia* emphatic from its position: see n. to 63. **727** *brattea*: 'videndum est ne barbaram consuetudinem sequantur qui scribunt *bractea*, ut *mactea blacta Actius Actis auctumnus arctus farctus mulcta*, quae ante quadringentos vel quingentos annos nata sunt' Lach.: see also n. to I 70 *arta*. **729** *percipiunt*: III 28 *voluptas Percipit atque horror*; 80 *Percipit humanos odium*; V 605 *Aera percipiat...ardor*; VI 804 *percepit*: [see Ussing to Plaut. Amph. 1134.] **730** *cientque* cet.: Cic. l. l. 2 *his autem spectris etiam si oculi possent feriri, quod vel iis ipsa occurrunt, animus qui possit ego non video.*

732 *Centauros*, *Scyllarum* are brought together V 891 foll.: comp. too Aen. VI 286 *Centauri in foribus stabulant Scyllaeque biformes*, probably a reminiscence of Lucr.; Cicero in combating this doctrine brings together *Scyllae Chimaerae hippocentauri.* **733** *Cer. can. fac.* is not like the instances cited in n. to I 474, but may resemble I 119 *Per gentis Italas hominum*: the *Cerbereas* merely defines what the *facies* are. *eorum Quorum* cet.: I 134 *coram Morte obita quorum* cet. 'ut appareat eum haec paria ac simplicissima, *eorum Quorum* non improbasse, noluisse autem quae dissimilia essent, sed non satis, coniungere, *coram quorum*' Lach. **736** *sponte sua quae fiunt* cet. i.e. the συστάσεις explained 131 *Sunt etiam quae sponte sua gignuntur.* *aere in ipso*: *ipso* is used here as II 438 *corpore in ipso*; III 128 *in ipso Corpore*; 483 and 506 *corpore in ipso*; 575 *in ipso corpore*, 590 *corpore in ipso*; VI 224 *in aedibus ipsis*; 579 *Aut extrinsecus aut ipsa tellure*; 806 *terra quoque sulpur in ipsa Gignier*; 1128 *aere in ipso*; II 117 *radiorum lumine in ipso*; III 683 *in ipso sanguine cresse*; that is it merely points the contrast between the thing spoken of and something else; in all these cases *intus in* pretty nearly gives the force of *in ipso*: Sen. Herc. Oet. 1364 *In ipsa me iactate, pro comites, freta Mediosque in amnes*: *ipsa*=medios. **738** *quae confiunt*: V 890 *Ne forte ex homine et veterino semine equorum Confieri credas Centauros posse.* **739** *Nam certe* cet.: Cic. de nat. I 108 uses this as an argument to overthrow the theory in question: *quid, quod earum rerum quae numquam omnino fuerunt neque esse potuerunt, ut Scyllae, ut Chimaerae?* **736—739** observe *fiunt*, *confiunt*, *facta*, *fit*. **741** *equi atque*: Lach. in his most elaborate n. to III 954 goes through the whole range of Latin poetry to determine who can and who cannot thus elide the last syll. of an iambus; and this liberty he peremptorily refuses to Lucr. I am not convinced: his contemporary Cicero whose

principles of versification much resemble his own, could write *rĕtro ad*, *leo et*, *modo ac*; his contemporary Catullus *ioco atque*, *ave atque*. But Lucr. had he thus elided once, must surely it may be said have done so more than once: yet he once and only once, V 849 *debere*, has a hypermetrical verse; twice and twice only he lengthens a short syll. by the caesura, II 27 *fulget auroque*, V 1049 *sciret animoque*; and twice by caesura leaves a long vowel long and unelided, III 374 *animae elementa*, VI 755 *loci ope*; though in five of these six cases Lach. tampers with the text. It strikes me that Lucr. here meant the tangled sound to recal the entangling of two incongruous images. **742** *Haerescit*: II 477 *haerescere*; lexicons give no other instances of the word. *ante* i.e. 726. **746** *prius* i.e. 176 foll. **747** *Quaelibet una*, and therefore even the most incongruous assemblage of things, if they have for the instant formed into one image. **748** *ipsa*, as well as the images.

749—776: so far as what the mind sees resembles what the eye sees, their causes must be like: now the lion we see in mind is the same we see with the eyes, both therefore are seen by images: and thus in sleep we see, for instance one who is dead, by images coming to the mind; the senses and memory being then inactive and not able to detect the absurdity: again images move as we see them in sleep, merely because some are coming others going every instant, so that they appear to be the same in different postures. **750** 'I take *quod* to be the conjunction: necessest simili ratione fieri quod videmus (i.e. videre) mente, atque quod videmus (videre) oculis' N. P. Howard: clearly the right explanation. **752** *Nunc igitur*: III 203 and 434 *Nunc igitur quoniam*: the particles imply that having established a principle, he now proceeds to apply it. *docui quoniam*: Aen. V 22 *superat quoniam fortuna, sequamur.* 'Lambinus recte dedit *quoniam docui*, ut in III 203 *Nunc igitur quoniamst animi natura reperta*' Lach.: an illustration not at all to the point; neither there nor in 434 could he have changed the place of *quoniam*: he has here written *docui quoniam* probably for the pleasanter sound: Ov. trist. II 293 *Pallade conspecta, natum de crimine virgo Sustulerit quare, quaeret, Erichthonium*; [Mart. X 36 7 *Non venias quare*; XI 75 3 *Non sit cum citharoedus*:] comp. II 547 and n. there; and III 293. **754** *mentem* cet.: Cic. de nat. deor. I 108 *vos autem non modo oculis imagines, sed etiam animis inculcatis: tanta est impunitas garriendi.* **757** *profudit*: Paulus Fest. p. 228 '*profusus*...abiectus iacens. Pacuvius *profusus gemitu murmuro*': III 113 *Effusumque iacet sine sensu corpus honustum*, in same sense. **758** *Mens animi*: see n. to III 615. *simulacra* cet.: Cic. l. l. *quid, quod etiam ad dormientem veniunt invocatae? tota res, Vellei, nugatoria est.* **760** *quem mors pot.*: but 766 *eum mortis pot.*: so 'dare aliquem leto' and 'dare letum alicui'. **761** *Rellicta*: see n. to II 1001 *rellatum*. **763** *offecti*: see n. to II 156 *Officiuntur*. **765** *meminisse*=memoria: see n. to I 331; [and comp. Ov. her. 7 164 *praeter*

amasse.] 766 *dissentit* does not appear to occur elsewhere with this constr.: 'compounds often take the inf. or whatever constr. the simple verb does, even where such a constr. seems unnatural in the new sense which the compound has: *sentit* "feels", *dissentit* "feels by way of objection" "protests": comp. 1088 *repugnat*' J. E. M.: see I 582 and n. there. *mortis letique*, another curious tautology: comp. 274 *duplici geminoque*, 451 *Bina geminare.* *potitum*, said of meeting with an evil, is illustrated by Forc. from Plautus Accius Terence and others: Plaut. capt. 144 *gnatus tuus potitust hostium*; [Amph. 175 *Eum nunc potivit pater servitutis*: see Ussing there.] 771 *perit*: see n. to III 1042: this ingenious explanation resembles that given above 318—323 of the movements of an image in a mirror: 'there is a toy which exactly illustrates Lucr.: the same figure in different positions is painted at intervals 10 or 11 times over on a card, which is placed in a revolving cylinder. The effect is that of very rapid motion through the whole series of positions' J. E. M. 772 *Indĕ statu*: above *Unde scias*; below *Libera sponte*; *superbia spurcitia*; even three consonants *mollia strata, manantibus stillent*; nay four *pendentibus structas.* 775 *sensibili quovis tempore in uno* is Epicurus' ἐν αἰσθητῷ χρόνῳ: see n. to 795 where the passage is quoted and illustrated; 795 is a paraphrase of the one word *sensibili.*

777—817: this question offers many difficulties: why does a man think of whatever he wishes to think, sea or earth or sky? while others in the same place have quite other thoughts: why too in sleep are these images seen to move rhythmically? are they forsooth trained by art? or is it that in the least sensible time many times are latent, in which many images can appear? the mind again, like the eye, in order to see must often attend and exert itself, else they will pass unheeded: again the mind adds many false inferences to what is seen.—818 foll. are immediately connected with the passage ending at 776; and our present paragraph discusses the same questions as that passage sometimes in the same, sometimes in a different spirit, without the least reference to it. Lach. is therefore incontestably right in including this among those subsequent additions which Lucr. made to his poem, but did not live to incorporate fully with the rest. The poet is evidently embarrassed by the prodigious difficulties which this theory of mental apprehension involves and struggles hard to solve them: not content with the preceding paragraph, he has tried to better his argument in this one. 779 *quod* depends on *cogitare* understood from *cogitet*: i.e. cogitet id ipsum, quod cogitare libuerit. 'haec quaestio' says Lamb. 'quare quod cuique libuerit, id cogitet, cum cogitatio simulacris excitetur, pendet ex superiore cet.': these words of Lamb. Havercamp with his usual diligence prints as a continuation of the words of Cicero cited just before; and Wak. with a no less conscientious diligence remarks 'locus etiam Ciceronis nat. deor. I quem Lambinus apposuit Lucretiano est consimillimus *haec quaestio quare quod cuique libuerit id cogitet* cet.' The blunder does some credit to their taste in Latin, as Cicero has seldom had a better imitator than Lamb. Cic. epist. ad fam. XV 16 thus jokes with his friend Cassius, *doceas tu me oportebit, cum salvus veneris, in meane potestate sit spectrum tuum ut, simulac mihi collibitum sit de te cogitare, illud occurrat; neque solum de te qui mihi haeres in medullis; sed si insulam Britanniam coepero cogitare, eius* εἴδωλον *mihi advolabit ad pectus?* and de nat. I 108 he asks *quid, quod hominum locorum urbium earum quas numquam vidimus? quid, quod simulac mihi collibitum sit, praesto est imago?*; and comp. the fuller discussion of the same question in de div. II 137. 783 *Si, si, si*=sive, sive, sive: an archaism, occurring in two old inscriptions, in Plautus more than once and in the antiquarian Fronto: see C. F. W. Mueller on *sive* p. 7: [see also 'si deus, si dea est,' carm. evoc. in Wordsworth's Fragm. and Spec. p. 285, and his note p. 410.] *denique*: see n. to I 278. 785 *sub verbo* 'est sub iussu' Lach. who refers to Lactant. inst. IV 15 22 *statimque sub verbo eius tranquillitas insecuta est*: see n. to 545 *sub murmure.* *verbo*: Livy has *senatus verbis, consulum verbis, praetoris verbis, dictatoris verbis*; Sallust *senati verbis, senatus populique Romani verbis*; Terence *verbis meis*; Plautus *verbis tuis, tuis verbis*, with the sense of *iussis*: Cic. ad Att. XVI 11, at end, *Atticae...meis verbis savium des volo.* 786 *Cum praesertim* has here precisely the force which we are taught by Madvig de fin. II 25 it often has in Cicero: 'and that too although'; he cites pro Sex. Roscio 66 *videtisne...cum praesertim deorum immortalium iussis atque oraculis id fecisse dicantur, tamen ut eos agitent furiae*: a good instance is Cic. orator 32 *nec vero, si historiam non scripsisset, nomen eius extaret, cum praesertim fuisset honoratus et nobilis*: [comp. also bell. Afr. 1 4 *cum praesertim ab incolis eius provinciae nuntiarentur adversariorum copiae, ...tamen non deterrebatur.*] The fact is that between this and the more usual sense, there is just the same difference as between *cum* 'since' and *cum* 'though'.

789 Hor. sat. I 9 24 *quis membra movere Mollius.* 790 *Mollia* I now take with *bracchia*: in ancient dancing the arms were more important than the legs: Ov. ars I 595 *si mollia bracchia, salta*; II 305 *Bracchia saltantis, vocem mirare canentis*; [III 349 *Quis dubitet quin scire velim saltare puellam, Ut moveat posito bracchia iussa mero?...Tantum mobilitas illa decoris habet*;] rem. 334 *Fac saltet, nescit siqua movere manum*; fasti III 536 *iactant faciles ad sua verba manus*; Prop. III (II) 22 5 *molli diducit candida gestu Bracchia*; Automedon 3 3, Anthol. II p. 208; βάλλει Τὰς ἀπαλὰς ἀπαλῶς ὧδε καὶ ὧδε χέρας. [See also Hesych. χειρονόμος· ὀρχηστής. χωρονομεῖ· ὀργίζεται. χειρονομεῖ· ὀρχεῖται. Bentl. ad Mill. 'This dance allows no movement of the legs: the feet scarcely stir. The performers balance themselves on their haunches, inclining their heads right or left, make graceful gestures with their arms and

assume attitudes most charming and most impassioned' 30 years in a harem p. 108.] *Moll. mob.*: Ov. am. II 4 14 *in molli mobilis esse toro. in num.*: Ov. am. II 4 29 *Illa placet gestu numerosaque bracchia ducit Et tenerum molli torquet ab arte latus*; rem. 754 *numeris bracchia mota suis.* **791** *repetunt* seems = iterant: this and the preceding v. explain the *mollia membra movere*, so that *repetunt* has no reference to *bracchia*, but merely to the presenting again and again to the eyes the same *gestum* with foot moving in time to the movements of the arms and body. **792** *Scilicet* introduces of course an ironical reason. *madent*: Hor. od. III 21 9 *Socraticis madet Sermonibus* well illustrates the force of the word, because there is a play there on the literal and metaphorical sense: for other examples see Forc. **794** *An magis*, giving what he believes to be the most likely cause. **795** is as we said above a paraphrase of *sensibili*: Lucr. means that the smallest sensible time is about equal to the time in which we can utter one word, and that in that smallest time are latently contained many rational times, or times such as the mind can conceive by its reason to exist. Thus in the smallest thing perceptible to sight or touch are contained very many things which the reason alone can apprehend, viz. atoms or the parts of atoms. With Lucr. comp. the τοὺς διὰ λόγου θεωρητοὺς χρόνους and the ἐν αἰσθητῷ χρόνῳ of Epic. in Diog. x 47; and with the *Cum sentimus id et cum vox emittitur una* comp. l. l. 33 ἅμα γὰρ τῷ ῥηθῆναι 'ἄνθρωπος' εὐθὺς κατὰ πρόληψιν καὶ ὁ τύπος αὐτοῦ νοεῖται προηγουμένων τῶν αἰσθήσεων. **802** foll. the reasoning here is all very good; but neither here nor elsewhere does he explain the all-important point how the mind is first turned to any object of thought. When the mind is once roused and the will set in motion, then it may be said it attends solely or mainly to the images connected with such object: but why should one image more than any other image first strike on the mind? this he does not explain: he attributed it I presume to accident, and therefore thought it unnecessary to enlarge upon it: comp. 885 *Id quod providet* cet. and what is said there. **802** *quae contendit* i.e. cernere, as Wak. rightly explains it; it comes therefore to the same thing as, nay is somewhat more emphatic than the *se contendit* of Lamb. and Lach. *acute Cernere*: 810 *cernamus acute*: Wak. compares Hor. sat. I 3 26 *Cur in amicorum vitiis tam cernis acutum?* **804** *siquae ad*: see n. to I 841: [and comp. Plaut. curcul. 467; Bacch. 174 *quem ad epistulam* and Ussing there.] **811** *Et tamen*: see n. to I 1050. **813** the want of a subject to *semotum fuerit* seems to me, as it seemed to Lamb., very harsh; but see n. to II 1043. **815** *in rebus deditus*: see n. to III 647. **816** *adopinamur* and 817 *frustraminis* seem both to be ἅπαξ λεγόμ. With this comp. the very similar argument of 464—468.

818—822 (826): sometimes too a woman will change to a man, or the like, but in sleep we do not perceive the incongruity.—As was said above this passage connects itself directly with that ending at 776, and continues the question of images which strike the mind in sleep.

823 (822)—857: pray do not think that the parts of the body have been given us in order to be used; in truth their use arose long after their first existence: before the eyes there was no seeing, before the tongue no speaking; on the other hand the instruments of peace and war we know to have been invented after their use was known; not so the senses and the limbs, which you must not believe to have had a final cause, as swords and shields, cups and beds had.—This passage too, as Lach. has proved to demonstration, interrupts the regular sequence of the argument, and must be a subsequent addition of the poet's: see the introductory remarks to II 165—183, where I have stated how Lach. brings the present into comparison with cognate passages in II and V. **823** *Illud* cet.: the argument is well put by Lactant. inst. III 17 with evident reference to Lucr. of whom he was a diligent student, *neque oculi facti sunt ad videndum neque aures ad audiendum neque lingua ad loquendum neque pedes ad ambulandum, quoniam prius haec nata sunt quam esset loqui audire videre ambulare. itaque non haec ad usum nata sunt, sed usus ex illis natus est.* *avessis*, like *prohibessis habessit licessit ausim iussim auxim sponsim noxim* III 444 *cohibessit*, all of the 2nd conj.: [Paul. Fest. p. 377 has *vallescit* which perhaps should be *valessit.*] In the first conj. these forms are exceedingly common, *amassis* and a hundred others. [On such forms see Westphal Verbalflexion p. 276—308; and Luebbert gramm. Stud. I.] The scholiast to Lucan IV 265 says '*avet* i. avide cupit. sic Lucretius saepe ponit'; and this is quite true. **824** *praemetuenter*, another ἅπαξ λεγόμ. **826** *prof. qu. Proc. pas.*: 877 *Nunc qui fiat uti passus proferre queamus.* **827** *fastigia* would usually mean the ends farthest from the *fundus*: Livy XXXVII 27 7 *collis est in modum metae in acutum cacumen a fundo satis lato fastigatus.* **828** *ped. fundata*: V 927 *solidis magis ossibus intus Fundatum, validis aptum per viscera nervis*: the latter words explain *plicari*, which graphically describes the mass of sinews and tendons in that part. **830** *manus...ministras*: 'Arnob. II 17' J. E. M.: Cic. de nat. deor. II 150 *quam vero aptas quamque multarum artium ministras manus natura homini dedit*, says the stoic Balbus in the middle of his strenuous defence of final causes. No doubt the zeal with which the stoics maintained this doctrine added vehemence to Lucretius' denunciations. Arist. de part. anim. IV 10 p. 687 8 in the midst of his long and brilliant statement on the side of the final cause quotes Anaxagoras' famous saying διὰ τὸ χεῖρας ἔχειν φρονιμώτατον εἶναι τῶν ζῴων ἄνθρωπον, and retorts εὔλογον δὲ διὰ τὸ φρονιμώτατον εἶναι χεῖρας λαμβάνειν, and a few lines after οὐ διὰ τὰς χεῖράς ἐστιν ὁ ἄνθρωπος φρονιμώτατος, ἀλλὰ διὰ τὸ φρονιμώτατον εἶναι τῶν ζῴων ἔχει χεῖρας: l. l. I 1 p. 640 19 he refutes Empedocles' saying τὴν ῥάχιν τοιαύτην ἔχειν, ὅτι στρα

φέντος καταχθῆναι συνέβη. 831 *ad vitam quae foret usus*: v 844 *nec sumere quod foret usus. quae* I take to be the accus.: comp. Plaut. Pseud. 385 *Ad eam rem usust hominem astutum doctum scitum et callidum*; [and Amph. 501, where see Ussing:] or *facere* may be supplied: for Lucr. 1268 *Nec molles opu' sunt motus*, like other writers, uses the plur. verb with a nom. plur. 832 *inter quaec. pretantur*: see n. to I 452. 836 *videre*, 837 *orare*, 843 *conferre*, 844 *lacerare*, *foedare*, 848 *mandare*, 850 *sedare* all = nom. subst.: see n. to I 331. 841 *foret usus*: *usus* has here of course its ordinary sense: *foret usus* above with the meaning of *foret opus* seems to have suggested to him the use of the words here in another sense: comp. I 875 *latitandi...latitare*, and n. there. 843 *At contra* cet.: Arist. de part. anim. I 5 and IV 10 goes over much the same ground as Lucr. here, and comes to exactly opposite conclusions: he uses the tools made by a man as a proof that the tools made by nature had the same end in view, the hand being ὡσπερεὶ ὄργανον πρὸ ὀργάνων: the body and all its parts are made for the functions they perform, as the saw is made for the sake of sawing: the sawing is not done for the sake of the saw. *conferre manu cert. pug.*: Lach. compares Aen. VII 604 *Getis inferre manu lacrimabile bellum* and X 146 *inter sese duri certamina belli Contulerant*: comp. too Livy XXVI 48 11 *prope esse ut manus inter se conferant*. 847 *daret obiec. parmai* = obiceret parmam, *daret*, as so often, being = faceret: see n. to 41: Aen. II 443 *clipeosque ad tela sinistris Protecti obiciunt*. 852 *ex usu vitaque* seems to be the same as *ex usu vitae*. 856 *procul est ut credere possis* seems on the analogy of *prope est ut*; but I know no parallel: *haud* or *non procul esse quin* is the usual expression.

858—876: the body requires food, because it loses many particles constantly, and thus an aching void is produced, which has to be filled up and the pain allayed; liquid too is taken into the body and quenches the particles of heat in the stomach; thus both thirst and hunger are appeased.—These vss. too, as Lach. p. 259 shews, are well adapted to the general subject of IV, but here interrupt the connexion of the argument and are manifestly an after-thought of the poet's. 860 *fluere* cet.: II 1128 *Nam certe fluere atque recedere corpora rebus Multa manus dandum est*: this with what precedes and follows is what the poet refers to in *docui*, together with perhaps IV 218—229: IV 695 *Nam penitus fluere atque recedere rebus odores*. 865 *igitur* in the apodosis: see n. to I 419. 866 *Subruitur*, 867 *suffulciat* belong to the same metaphor, the shoring up a falling structure: Hor. sat. II 3 153 *ni cibus atque Ingens accedit stomacho fultura ruenti*: comp. II 1140 *fulcire cibus* and n. there: Lucr. speaking of the causes of sleep says IV 942 *Fit quasi paulatim nobis per membra ruina*, and then 950 *Et quoniam non est quasi quod suffulciat artus*. 868 *interdatus*: 227 *interdatur*: see n. to 716. *patentem*, 869 *opturet* are also the same metaphor. 869 *amorem edendi*, the ἐδητύος ἔρον of Homer which Virgil too translates by *amor edendi*. 875 *tibi*: see n. to I 797.

877—906: this is how we walk: idols of walking strike the mind, and rouse the will; next the soul throughout the body is stirred by the mind, and then the body by the soul; the body too is then rarefied, and the outer air at once enters into all the opened pores; so that the body is pushed on as a ship by the wind; the mass of the body being moved and steered by a few small particles, just as a big ship by the rare wind and by the hand of the pilot: thus too a machine will easily lift a heavy weight. [878 *datum sit...movere*: Pliny epist. III 1 1 *si modo senescere datum est*: 'Kuehnast synt. Liv. 252; Hor. epist. I 1 32' Mayor: *dare* with infin. '(Cic. u. Caes. nicht) Liv. zweimal, sonst *ut*' Kuehnast.] 882 *Accidere* in its literal sense has in Lucr. four constructions, II 1024 *ad auris*, IV 215 *in oras*, V 608 *segetes stipulamque Acc.*, here *animo* and V 97 *res menti Acc.* *ante* i.e. 722 foll. 884 *quam mens* cet. as shewn III 245 foll.: *quam ante*: see n. to III 973 *quam nascimur ante*. 885 *quod* is the conjunction: Lamb. Creech and others have misunderstood and corrupted the passage: *id* and *illius rei* refer of course to the same thing, viz. *quid velit*; and *quod* has a peculiar but not unusual force, denoting rather the effect than the cause: indeed 'providet id, quia eius imago constat' would express exactly the meaning of Lucr. To translate 'because' would pervert the reasoning; for 881 *animo nostro primum* cet. the images first of all strike the mind: comp. my note and illustrations to 724 foll. and 802 foll. and Cic. de fin. I 21 *imagines quae εἴδωλα nominant quorum incursione non solum videamus, sed etiam cogitemus*, and Plut. de plac. phil. IV 8 of Leucippus and Democritus μηδενὶ γὰρ ἐπιβάλλειν μηδετέραν (νόησιν) χωρὶς τοῦ προσπίπτοντος εἰδώλου. *Quod* cet. therefore means 'the reason why he predetermines that thing is this: an image etc.': the phrase is elliptical, 'quod providet id, [hoc fit quod] illius rei est imago'; and the full expression is seen in Catull. 68 33 *Nam quod scriptorum non magna est copia apud me, Hoc fit quod Romae vivimus*: comp. 10 28 *Istud quod modo dixeram me habere, Fugit me ratio*, i.e. [hoc factum est quod] fugit m. r.: Cic. ad Att. XII 18 a 2 *nam quod non advocavi ad obsignandum, primum mihi non venit in mentem, deinde ea re non venit quia* cet. i.e. [hoc factum est quod] primum cet.: Ov. trist. III 1 13 *Quod neque sum cedro flavus nec pumice levis, Erubui domino cultior esse meo: Littera suffusas quod habet maculosa lituras, Laesit opus lacrimis ipse poeta suum*; amor. I 13 33 *quod erat tibi filius ater, Materni fuerat pectoris ille color*; III 5 39 *Pectora quod rostro cornix fodiebat acuto, Ingenium dominae lena movebat anus: Quod cunctata diu taurum sua vacca reliquit, Frigidus in viduo destituere toro*; Sen. Oct. 752 *Iugulo quod ensem condidit princeps tuus, Bella haud movebit*, cet.; [Phaedr. II 4 8 *Nam fodere terram quod vides cotidie Aprum insidiosum, quercum vult evertere*; Mart. II 111 *Quod fronte Selium nubila vides*,

Rufe, Quod ambulator porticum terit seram, Lugubre quiddam quod tacet piger vultus, Quod paene terram nasus indecens tangit, Quod dextra pectus pulsat et comam vellit: Non ille amici fata luget cet.; VIII 21 3 *placidi numquid te pigra Bootae Plaustra vehunt lento quod nimis axe venis?*; 82 2 *Nos quoque quod domino carmina parva damus, Posse deum rebus pariter musisque vacare Scimus, et haec etiam serta placere tibi.*] So Aen. II 180 *Et nunc quod patrias vento petiere Mycenas, Arma deosque parant*, i.e. [hoc fit quod] arma cet.: Wagner's explanation and the instances in Heinsius' note to which he refers are quite irrelevant. The old hexameter *sors*, inscr. Lat. I 1453, *Quod fugis quod iactus tibei quod datur spernere noli*, which Ritschl and Mommsen alter in various ways, seems midway between the full and elliptical phrases: 'Quod fugis, quod iactas, [hoc fit] quod tibi datur: spernere noli': an illustration of *semper aves quod abest, praesentia temnis.* *rei* monosyll. as III 918. **887** *corpore toto* cet.: see n. to II 271. **889** *coni. tenetur*, so fully explained in III; as 136 *animum atque animam dico coniuncta teneri Inter se atque unam naturam conficere ex se.* **896** *rebus utr. duabus* seem to be the inward movement of the body by the impulse of the *animus* and *anima*, and the propulsion from without by the entrance of the outer air. *velis ventoque* then do not correspond to this two-fold cause of motion; as they would represent merely the effect of the outer air on the body. Gassendi therefore, opera II p. 506 b, had reason for proposing *remis ventoque*; as the *remis* would answer well enough to the *anima* and its effect on the body. 'But may not *corpus* and *aer* correspond to *velis ventoque*, expressing simply the secondary cause of the motion of the body, the air acting on the frame as the wind on the sails of a ship' F. H. Peters. This explanation I am now disposed to adopt: the metaphor then will only apply to 892 *Praeterea* cet. not to what precedes; and *utrimque* is on the one hand the rarefying of the body; on the other the entering in of the air; and all this seems to be confirmed by VI 1031 *Hic* i.e. aer.. *per crebra foramina ferri Parvas ad partis subtiliter insinuatus Trudit et inpellit, quasi navem velaque ventus*: 896 I have left unaltered, as I have doubts on the whole passage; and cannot decide between the *Corporis ut navis* of Lach., the *Aeque id ut ac n.* of Bern., and other changes proposed. **899** *Tantula tantum corpus corpuscula*: V 593 *Tantulus ille queat tantum sol mittere lumen*; Cicero and Caesar use *tantulus* and *tantus* together in the same way: but this love of antithesis shews itself in a hundred ways in Lucr.; 901 *suptili corpore tenuis, magnam magno molimine*; 905 *pondere magno, levi nisu.* **902** *molimine* expresses the momentum of the huge ship in motion: Livy II 56 4 *res suo ipsa molimine gravis.* It may refer however to the great force of the impelling wind; as Ov. met. XII 356 *solidoque revellere trunco Annosam quercum magno molimine temptat.* **904** *contorquet* of steering, as 900 *Contorquere*; Aen. III 562 *Contorsit laevas proram Palinurus ad undas.*

905 *trocleas* were certain arrangements of blocks of pulleys, described by Cato and Vitruvius. *tympana* seem to have been wheels which revolved by men treading on them, and raised to their places columns and other heavy weights; both the *trocleas* and *tympana* being portions of the same *machina.* *pondere magno*: abl. of quality depending on *Multa*: it gains force by its position: comp. V 556 *quam magno pondere nobis Sustineat corpus tenuissima vis animai*, and VI 548 549: Aen. IX 512 *Saxa quoque infesto volvebant pondere*; X 381 *magno vellit dum pondere saxum.*

907—928: sleep takes place, when the soul is scattered in the body, and part of it has gone out, part withdrawn into the depths of the body: only part however can go forth; else death would ensue; enough must stay behind to let sense be rekindled, as fire is rekindled when buried under the ashes. **907** *somnus* cet.: Macrob. sat. VI 1 44 compares with this Aen. I 691 *placidam per membra quietem Inrigat*, and Furius in primo *mitemque rigat per pectora somnum*: comp. too Aen. III 511 *fessos sopor inrigat artus*; Pers. V 56 *inriguo somno*; and Conington to Aen. I 691. **909—911** = 180—182. **912** *da tenuis* cet.: I 50 *vacuas auris animumque sagacem.. adhibe.* **916** *somnus fit*: Epic. in Diog. X 66 ὕπνον τε γίνεσθαι τῶν τῆς ψυχῆς μερῶν τῶν παρ' ὅλην τὴν σύγκρισιν παρεσπαρμένων ἐγκατεχομένων ἢ διαφορουμένων, but the next words are clearly corrupt. **916—918** are the same in meaning as 944 foll. and 959—961 *Fit ratione eadem coniectus* cet. **924** *corpus* cet.: III 401 *Et gelidos artus in leti frigore linquit.* **926** *cinere multa*: Marullus says in marg. cod. Victor. 'sic Catullus *Troia virum et virtutum omnium acerba cinis*' and at bottom of the page '*cinis* feminino Catullus Virg. in ceter. masculino': he is in error as to Virgil: Nonius says it is fem. in Caesar and Calvus; and Charisius I, p. 101 Keil, quotes from the latter *fulva cinis* and *ipsa cinis.* **927** *reconflari* seems not to occur elsewhere: the metaphor is of course from kindling fire.

929—961: sleep is thus produced: the body is constantly beaten upon by the outer air as well as by that which is inhaled by breathing; thus assailed within and without the body gives way, and the soul is disordered, part of it as has been said leaving the body, part withdrawing into its recesses, while the rest cannot perform its functions: thus the body too becomes languid and powerless: again sleep follows eating, because the food in passing into the system acts on it as the air does; and the disorder of the soul is then greater than ever. **934** *eius* i.e. aeris: *aeriis auris* being the same as *aeris auris*, which he often uses: see n. to I 352, and comp. II 174 *genus humanum quorum*, and n. there: so Cassius ap. Cic. epist. ad fam. XV 19 1 *propter spectra Catiana, pro quo* i.e. Catio; Aen. I 671 *vereor quo se Iunonia vertant Hospitia: haud tanto cessabit* i.e. Iuno; Plaut. rud. 598 *Ad hirundininum nidum* cet. followed by *Neque eas* i.e. hirundines: miles 186 the reading seems to be *ut ne quoquam de ingenio degrediatur muliebri Earumque artem* cet.;

though Ritschl says 'posterioris esse interpretamentum priorem, apparet, in quo olim scriptum fuit *mulierum*'. [Comp. too Pliny XXXV 5 *epicurios voltus per cubicula gestant ac circumferunt secum. natali eius sacrificant*: and see Mayor's n. to Juv. XIV 241.] **936** *Aut etiam*: see n. to I 1012 *Aut etiam.* **939** *utrimque secus*: 'Lucil. sat. lib. XXII *Zopyrion labeas caedit utrimque secus*' Nonius p. 210: the expression is not uncommon in late Latin, as in Apuleius: in Cato apparently it is followed by an accus., *secus* being = secundum: comp. the use of *versus* and *versum* with *undique, sursum* and the like; and *extrinsecus intrinsecus altrinsecus.* **940 941** comp. above 894 895. **944** *fit uti pars inde* = inde fit uti: see n. to II 1004. **944** foll. comp. above 916—918 and below 959—961. **947** *mutua fungi* occurred III 801, where see n. and references. **952** *cubanti* cet. i.e. quamvis cubanti, tamen saepe cet.: comp. 987 *cum membra iacebunt In somnis sudare tamen*; 991 *in molli saepe quiete Iactant crura tamen*; [Prop. III (II) last elegy 50 *Trux tamen a nobis ante domandus eris*;] Livy XXIX 17 13 *unam, profundam quidem, voraginem tamen patientia nostra expleremus*: see also III 553 and n. there. **953** *summittuntur*: I 92 *terram genibus summissa petebat*; where see note. **959—961** comp. above 916 foll. and 894 foll. where all the same symptoms are mentioned; but here, as the sleep is heavier than usual, each symptom is aggravated: *altior, largior, divisior.* **961** *divisior, distractior*: these comparatives seem unexampled; Paterculus has *distractissimus*; but the superl. of participles is not so rare as the compar.: V 394 *superantior*, III 397 and VI 238 *dominantior* seem also confined to Lucr.; but Neue, Formenlehre p. 86 foll. gives pages of examples of comparatives and superlatives of participles past and present. *in test*, for 957 we have *Quem satur aut lassus capias.*

962—1036: the dreams of men generally turn on what has chiefly occupied their waking thoughts, whether business or pleasure: it is the same with brutes too: again the passions which are strongest in men often display themselves in dreams, as well as other mental states. **962** foll. comp. Accius fab. praetext. 29 *Rex, quae in vita usurpant homines, cogitant curant vident, Quaeque agunt vigilantes agitantque, ea sicui in somno accidunt, Minus mirum est*: Marullus 'hinc Claudianus maiorem partem sui exordii sumpsit': he refers to the pref. paneg. de sexto consul. Honor. **962** *quo* depends on *devinctus*, as shewn by the imitation of Fronto quoted by Lach. *ut, quo studio quisque devinctus esset, aut histrionem in somnis fautor spectaret aut* cet.: Cic. epist. ad fam. III 13 2 *in iis studiis, quibus uterque nostrum devinctus est.* **964** *Atque in ea*, following relative clauses: see n. to I 718. **966** *Causidici* cet.: Petronius frag. XXX evidently had this part of Lucr. in his mind: *Somnia quae mentes ludunt* cet. and *Qui causas orare solent, legesque forumque Et pavidi cernunt* cet.: perhaps too he was thinking of Lucr. when he wrote sat. 104 hinc scies *inquit Eumolpus* Epicurum esse hominem divinum qui eiusmodi ludibria facetissima ratione condemnat. *componere*: Cic. de leg. I 14 *an ut stipulationum et iudiciorum formulas componam*; Juv. VI 244 *Componunt ipsae per se formantque libellos.* *leges*: abundant examples of *leges* of buying selling letting may be seen in Cato de re rust. 145 foll. *oleam faciundam hac lege oportet locare, oleam pendentem hac lege venire oportet*; and so of *vinum pendens, vinum in doliis, pabulum hibernum, fructum ovium, qua lege venire oportet*: Plaut. capt. 177 *Quasi fundum vendam, meis me addicam legibus.* **967** *pr. obire*: Aen. VI 167 *pugnas obibat*; Livy IV 7 2 *obire tot simul bella.* **968** Lamb. finds *degere bellum* inadmissible; Lach. thinks that it is unexampled, but may perhaps be supported by *agere* and *peragere bellum.* **969** *agere hoc*: see n. to I 41. **975** *sens. us.*: see I 301 *Usurpare oculis* and n. there. **978—981** form two consecutive rhyming couplets: Cic. de cons. suo, in de div. I 20, *monebant, ferebant, iubebant, vereri, teneri* end 5 consecutive vss.; and just below *morata, locata.* **980** comp. above 788 *in numerum procedere cum simulacra Cernimus in somnis et mollia membra movere* cet. **984** *refert st. at. vol.*: Plaut. Persa 593 *Quae ad rem referunt*; Livy IX 9 7 *ne illud quidem . . refert*: but with pronouns it is more common: lexicons cite from Pliny *longitudo refert, non crassitudo; ratio refert*: Cic. ad Att. III 19 1 *non quo mea interesset loci natura.* **988** and **992** *tamen*: see n. to 952. **993** *redducunt*: Petron. sat. 98 *reducto timidissime spiritu.* **997** *redeant*: *donec* elsewhere in Lucr. takes always an indic.: see n. to I 222. **998** and **1007** *At*: see n. to 414. *consueta* i.e. which has lived with the family and been domesticated; V 1334 *domi domitos*: Lach. compares Plaut. asin. 221 *amatores aves. Bene salutando consuescunt, compellando blanditer*: comp. also Ov. met. XI 89 *Hunc adsueta cohors Satyri Bacchaeque frequentant.* *catulorum blanda propago* = catuli blandi: see n. to III 741 *leonum Seminium*, and below to 1232; and comp. Virgil's *Romana propago*, and Nepos Attic. 18 2 *clarorum virorum propagines.* **1005** *seminiorum*: see n. to III 741. *quaeque*: the plural followed by the gen. is rare: Hor. sat. I 4 106 *vitiorum quaeque.* **1009** *proelia pugnas*: see n. to II 118. **1010** i.e. persectantesque volantes visae sunt edere, and other pursuing birds: Nonius p. 192 is wrong in saying *accipitres* here is fem. though he formerly misled me: see n. to III 136: II 1083 *volantum*, as Aen. VI 728: for position of *que* see n. to II 1050. **1011** *magnis motibus*: it is because they are under the stimulus of some great emotion, that in sleep they cannot get rid of it. **1014** *quasi si*, a rare union: Forc. quotes an instance from Plaut. Cas.; and *quasei sei* occurs in the inscr. Lat. I, 6 or 7 times, being a regular legal phrase: comp. *nisi si.* [See also Plaut. Amph. 1094 *quasi si...veniam*: Ussing here quotes other instances from Plautus: see too Langen Beitr. zu Plautus p. 320. **1019** *Indicio . . facti*: for the dat. see n. to

VI 771; and for the gen. Roby gramm. pt. II. p. XXX.] **1024** Wak. compares Aen. IX 680 *Sive Padi ripis, Athesim seu propter amoenum.* **1026** *Puri* for *pueri* is surely an impossible contraction in hexameters: why should not Lucr. have written *Saepe lacum pueri*, as two lines above he has written *Flumen item sitiens*: the *Tum quibus* of 1030 seems to me to have no more reference to *Puri* than to this *sitiens*; nay less, for comp. 1097 *Ut bibere in somnis sitiens quom quaerit* cet., *Sic in amore Venus simulacris* cet. which refers in fact to our passage: the thirsty man and the lover alike owing to their vehement craving see the *simulacra* of what they desire. My difficulty is that *puri* ought rather to be *mundi*, not clean but of cleanly habits. For the sense comp. Hor. sat. I 3 90 *Comminxit lectum potus...minus hoc iucundus amicus Sit mihi.* Yet I see on all hands *Puri* is taken for *pueri*, and I may be in error. *lacum*: Lach. cites Juvenal VI 603 *Ad spurcos lacus.* *dolia*: Macrob. sat. III 16 15 quotes from C. Titius 'vir aetatis Lucilianae' *dum eunt, nulla est in angiporto amphora quam non impleant.* [*curta*: Prop. V (IV) 5 75 *curto vetus amphora collo*; Mart. III 82 3 *Curtaque Ledae sobrius bibat testa.*] **1028** imitated by Seren. Samon. 77 *ex asino saccatus corporis umor*; [and by Arnob. II 37 *saccati* cet.] **1029** *Babylonica*: 1123 *Babylonica fiunt*: Pliny VIII 196 *colores diversos picturae intexere Babylon maxime celebravit et nomen imposuit.* **1032** *quoque*: Lachmann's *quodam* is a violent change and quite uncalled for: he says 'ex uno quodam certo corpore; v. 1048 *Idque petit corpus* cet.': certainly not; there it is a waking man in presence of the object loved: here he speaks of one with the germs of love in him meeting in his sleep with *simulacra* proceeding from any chance person, just as the *sitiens* has *simulacra* from any chance water whatever: *quoque* is indefinite exactly as 797 *fit uti quovis in tempore quaeque Praesto sint simulacra*; 155 *quamvis subito quovis in tempore quamque Rem contra speculum ponas*; V 1152 *Circumretit enim vis atque iniuria quemque.* **1035** *transactis*: Theocr. II 143 Ἐπράχθη τὰ μέγιστα.

1037—1057: **1037** *ante*, i.e. 1030 foll. **1042** *dec. corpore toto*: Epic. in Diog. X 66 τό τε σπέρμα ἀφ' ὅλων τῶν σωμάτων φέρεσθαι, as Democritus also taught according to Plut. de plac. phil. V 3: comp. too Hippocr. de genit. 8 ἡ γονὴ ἐξέρχεται καὶ τῆς γυναικὸς καὶ τοῦ ἀνδρὸς ἀπὸ παντὸς τοῦ σώματος. **1044** partly recurs VI 1207. *ipsas*: 651 *Omnibus in membris et in ore ipsoque palato.* **1046** 'Licin. ap. Non. p. 260 *per forum se in capitolium contendit*' J. E. M. **1048** *Id* is accus., *corpus* nomin. **1049—1056** there is an elaborate irony in these vss.: the first three make a general statement, of which the last five are a special application. **1049** *omnes plerumque*, like *plerique omnes*: Caes. de bell. Gall. V 57 3 *equites plerumque omnes*: all fall towards their wound, whether in the fields of Mars or Venus or elsewhere; then 1055 is an ironical application of this. *in vulnus* seems intentionally ambiguous, meaning both the wound itself and that which occasions the wound: Aen. X 488 *Corruit in vulnus*; and comp. Lucan VII 603 *tunc mille in vulnera laetus Labitur* with 619 *letiferum per cuius viscera vulnus Exierit* and 625 *Quis cruor emissus perruperit aera venis Inque hostis cadat arma sui*: both Virgil and Lucan may have been thinking of Lucr.: Livy I 58 11 *cultrum.. in corde defigit prolapsaque in vulnus moribunda cecidit*; II 46 4 *telo extracto praeceps Fabius in vulnus abiit.* This and the two next vss. are obelised by Lamb. and others, manifestly because they have not caught the poet's satirical irony, which pervades all this part of the poem. *sanguīs*: see notes 1 to I 853: it is found in Virgil, Tibullus, Seneca, Val. Flaccus and the Aetna; and more than once in Ovid, Lucan and Silius. *icimur*: III 160 *icit.* **1051** *hostem* cet.: comp. Lucan l. l. *ruber umor* is said apparently with the same ambiguous irony as 1036 *cruentent.* **1052** *telis, ictus*, **1053** *iaculatur*, **1054** *iactans*, **1055** *feritur* are all used to keep up the play of thought about wounds and enemies. **1054** comp. Cic. Arat. 110 *toto spirans de corpore flammam.*

1058—1072: when tormented by love seek distraction; else your passion will only be increased by the absence of the object loved. **1058** *Haec* refers to *voluptatem*, *hinc* to *cupido* of the preceding v.; and there is the usual contrast between *Venus* and *amor* or *cupido*, the gratification of the passion and the passion itself: 'haec voluptas nobis est Venus; ex hac autem cupidine est nomen Latinum amoris, hoc est Cupido': with *Haec Venus* comp. 1084 1085 and especially 1073 *Nec Veneris fructu caret is qui vitat amorem.* *nomen am.*: Ov. ars II 16 *Nunc Erato: nam tu nomen amoris habes.* **1059** *Hinc* also refers to *muta cupido*; so that this verse is a paraphrase of *voluptatem praesagit.* *illaec* recurs 1083, where it is neut. plur.; *illic illaec illunc illanc* occur in Plautus. **1060** *Stillavit gutta*: Bentl. compares Eur. Hipp. 527 Ἔρως, Ἔρως.. Ὅστις στάζεις πόθον εἰσάγων γλυκεῖαν ψυχαῖς χάριν κ.τ.λ. [So Plaut. Epid. 554 *a, guttula Pectus ardens mi adspersisti.*] *frigida*: Juv. I 166 *cui frigida mens est Criminibus.* **1061** *quod*: Plaut. trin. 242 *Nam qui amat, quod amat, cum extemplo eius saviis perculsus est*; [curcul. 170 *Ipsus se excruciat qui homo quod amat videt nec potitur dum licet.*] *quod ames* must not be tampered with: it = quod amamus; and is another instance of that perpetual use of the potential with the 2nd pers. sing.: Cic. ad Att. XV 4 a 1 *nisi forte, quae non ames, omnia videntur insulse fieri*; [Lael. 100 *amare autem nihil est aliud nisi eum ipsum diligere, quem ames*: see Seyffert (Mueller) p. 318;] Ov. ars I 741 *non tutum est, quod ames, laudare*; amor. III 14 7 *quae nocte latent, in luce fateri, Et quae clam facias, facta referre palam*: Publil. Syrus *Cum ames, non sapias; aut cum sapias, non ames: Quod timeas citius quam quod speres evenit: Quod nescias cui serves, stultum est*

parcere: Quod fugere credas: just below, 1070, in one sentence *conturbes—cures—possis.* **1062** *obv. ad*: the dat. is the usual constr.: 978 *obversantur Ante oculos.* **1064** *Absterrere sibi*: 1233 *satum genitalem numina cuiquam Absterrent*, with same sense and constr.; v 846 *natura absterruit auctum*: lit. to scare away, hence=adimere. **1066** *semel* cet. i.e. semel conversum in unum amore eius, with reference to 1064 *alio convertere mentem*: comp. too 1072 *alio possis animi traducere motus. conversum* agrees of course with the subject of the sentence. **1068** *vivescit*: 1138 *vivescit ut ignis.* *alendo*: see n. to I 312 *habendo*; and Virg. geor. III 454 *alitur vitium vivitque tegendo.* **1069** *gravescit*: III 1022 *gravescant*, VI 337 *gravescit*; for the *ingravesco* of prose. **1070** *Si non prima* cet.: Cic. Tusc. IV 75 *etiam novo quidam amore veterem amorem tamquam clavo clavum eiciendum putant.* **1071** *volgivaga*: v 932 *Volgivago vitam tractabant more ferarum*: the word seems not to occur elsewhere; and to be intended to express Ἀφροδίτη πάνδημος. *vagus* implies *volgivaga Venus*: Sen. Herc. Oet. 364 *quot nuptas prius, Quot virgines dilexit.* *erravit vagus.*

1073—1120: moderation in this as in other passions affords the truest pleasure: indulgence only increases the force of the passion which food instead of appeasing only makes more ravenous. **1076** *miseris*, 1159 *miseri*, 1179 *miser* express the Greek δυσέρως, as often in Latin: Ov. rem. 658 *Aut amat aut aegre desinet esse miser.* **1080** *dentes inl.*: Hor. sat. II 1 77 *fragili quaerens inlidere dentem, Offendet solido.* **1081** *Osc. adfl.* i.e. adfligunt osculum osculo; for *osculum* has its literal sense of 'mouth': Ov. met. I 499 *videt oscula, quae non Est vidisse satis*: [Mart. XI 91 7 *Ipsaque crudeles ederunt oscula morbi.*] It is curious that here too A and B exemplify the usual confusion between *adfligo* and *adfigo.* **1083** *rabies* gen.: so Enn. ann. 401 *dies*, which form Gellius IX 14 6 on the authority of Caesellius and many old mss. assigns to Cic. pro Sestio 28, and after those 'qui scripserunt idiographum librum Vergilii se inspexisse' to Virg. geor. I 208: Gellius also defends and illustrates the forms *dii fami pernicii luxurii acii.* **1088** *totum*: see n. to I 377. *repugnat* takes an infin. 1269 *prohibet se concipere atque repugnat*; Ovid her. 17 137 *amare repugno Illum*; but there the word means to strive not to do a thing; here it means *contradicens affirmat*: see n. to 766, and I 582. **1091** *mem. ads. intus*: VI 1169 *Flagrabat stomacho flamma ut fornacibus intus*; 202 *rotantque cavis flammam fornacibus intus*; 278 *acuit fulmen fornacibus intus*; 798 *animam labefactant sedibus intus*; Livy XXV 11 15 *sinu exiguo intus inclusae*; Aen. VII 192 *Tali intus templo* cet.; culex 76 *vallibus intus.* **1095** *Nil fruendum*: above, 1078, *quid fruantur*; see n. to III 956. **1096** *quae* cet.: sorry as it is, it is often snatched away before it can be enjoyed: *spes* refers to 1086 1087; comp. with them 1097 1098. **1100** *torrenti*: the overflowing stream increases the force of the contrast.

1102 *spectando*: see n. to I 312 *habendo.* **1106** *praesagit gaudia*: above 1057 *voluptatem praesagit.* **1107** is *in eost* personal here, *Venus est in eo ut*; or impersonal, i.e. res in eo est, ut Venus? comp. Livy II 17 5 *et cum...iam in eo esset ut in muros evaderet miles*, where there seems to be the same ambiguity: so Nepos I 7 *cum iam in eo esset ut oppido potiretur*; IV 5 *cum iam in eo esset ut comprehenderetur*; Servius to Aen. III 286 certainly makes the verb personal, *cum in eo essent ut iam civitatis potirentur*, imitated perhaps from Nepos; and so Soph. Elect. 21 ὡς ἐνταῦθ' ἐμέν, ἵν' οὐκέτ' ὀκνεῖν καιρός, if the reading is right: but there is no ambiguity in Livy VIII 27 3 *iamque in eo rem fore ut*; XXVIII 22 8; XXX 19 3; XXXIII 41 9. **1112** *facere* i.e. hoc facere; as often in Latin: 1153 *Nam faciunt homines*; 1195 *Nam facit ex animo saepe*: Ter. ad. 969 *Denique hic volt fieri...vin tu hoc fieri*; Phorm. 121; Plaut. Pseud. 533 *si non faxis* (mss. *id faxis* Ritschl); Cic. ad Att. XVI 15 1; 16 e 15; de leg. III 33; Pliny epist. IV 26 1; V 1 4; VI 23 1; IX 18 2; Livy XLII 37 6; Juv. VII 14; [Sen. rhet. suas. VI 12 *faciet, rogabit*; controv. I 1 3 *faciamque*; ib. 19 *non feci*; 7 14 *sciebam enim piratas non facturos.*] **1118** *Cum* cet.: i.e. cum quaerunt quid cupiant ipsi sibi cont.: Sen. epist. 31 5 *eligas, quid contingere tibi velis, quid optes.* **1120** comp. Ov. her. 4 20 *Urimur et caecum pectora vulnus habet.*

1121—1140: lovers ruin their health and fortune; and even then their happiness is often poisoned by jealousy. **1123** *Labitur res*: Plaut. trin. 243, in the midst of a scene describing a lover's ruin, *Ilico res foras labitur liquitur.* *Babylonica*: see n. to 1029. *Babylonica fiunt* i.e. *res fit* or *vertitur in Babylonica*: 1129 *bene parta patrum fiunt anademata.* **1125** *Huic* i.e. amicae: certainly the absence of any word to shew the change of subject would be harsh; as before and after the lover, not the mistress, is the subject. *lenta...Sicyonia*: ciris 169 *Cognita non teneris pedibus Sicyonia servans*; Cicero speaks of them as not suited for men. *pulchra*: Lucil. III 53 Muell. *Et pedibus laeva Sicyonia demit honesta.* **1126** *cum luce*: see n. to I 755 and 287: Cicero in his Aratea has *Vergilias tenui cum luce*; *valida cum luce refulgens*; *larga cum luce Bootes*; *claris cum lucibus Orion*; and *cum lumine* again and again. *zmaragdi*: the *z* also in II 805; Ζμύρνα is found in Greek inscriptions, and ζμερδαλέα in the Herculanean ms. of Philodemus περὶ εὐσεβείας just published; Eustathius shews that this use of ζ before μ was very general; in Orell. inscr. 2510 *zmaragdi* occurs seven times; and the best mss. of Livy give *Zmyrna, Zmyrnaei*; of Ovid *zmaragdos*; of Seneca *zmaragdos* and *zminthea*: inscr. Rhen. 1124 the name *Zmaragdus.* **1127** *Auro incl.*: to be used probably as a *fibula* or brooch: *includ.* appears to be the technical term: Aen. XII 210 *artificis manus aere decoro Inclusit*; X 136. *thalassina*: some shade of purple or ἁλιπόρφυρος; Plaut. miles 1179 *Palliolum habeas ferrugineum, nam is colos thalassicust.* **1129** *bene parta patrum*: Ter. Phorm. 788 *mei patris bene parta.* *anad.*

mitrae: Aen. IX 616 *habent redimicula mitrae* and Antipater Sid. anthol. II p. 31 Ἄνδεμα δ' αὖ μίτρας [and Eur. Hec. 923 ἐγὼ δὲ πλόκαμον ἀναδέτοις μίτραισιν ἐρρυθμιζόμαν] might make us join the two words; but they are more emphatic when separate; and Paulus in the digest has *mitrae et anademata*. The *anadema* then will be an ornamental band for the head: χρυσέας κόμης Ἀνάδημα, says Eur. Hipp. 81; the *mitra* a scarf covering the head and much of the face; though it may be the other *mitra* or *zona*: μαλακαί, μαστῶν ἐνδύματα, μίτραι, says Hedylus anthol. I p. 483: Lucil. II 26 Muell. *Chirodyti aurati, ricae, thoracia, mitrae.* **1130** *Alidensia* of mss. I now retain, agreeing so far with Wak. that it may refer to the Carian Alinda; for I see that in Pliny V 109 Detlefsen with the mss. gives *Alidienses* (? *Alidenses*) in the list of the Carian peoples: with *Alinda Alidensis* I would compare *Vicentia Vicĕtini* (Οὐικετία). [Perhaps with the quantity *Alĭd.* one might compare Plaut. Menaech. 235 *Ilurios=Illyrios*. It appears that *Alidiensis=Alidensis*, as Pliny XIV 16 has *Veroniensium*; 67 *Veroniensi*; XV 48 and XXXVI 48 *Catulli Veroniensis*: so Lucil. lib. inc. 103 mss. give *pisciniensis* for *Piscinensis*.] I had thought of *Haliensia*, as Ἁλιεῖς was a seaport of some consequence in Hermionis, mentioned by Herod. Thucyd. and Xen. and might have been an emporium of the Laconian purple. Jessen quaest. Lucr. p. 10 thinks that *Alid.* may mean 'Elean,' as Pliny calls Elean byssus 'deliciae mulierum'; but we cannot get over the *ā*. *Cia* i.e. Κεῖα: Lach. proves from Pliny IV 62 that Varro mistook Aristotle's Cos for Ceos; Lucr. and Pliny followed him in his error; Lucr. therefore uses *Cia* or *Cea* for *Coa*. *vertunt* neut.: see n. to III 502 *reflexit*; and comp. V 1422 *neque in fructum convertere quisse.* **1131** *veste*, the coverings of the furniture and hangings of the room. *ludi*, 'absurde in apparatu convivii' says Lach.: but they may well come in after the feast with the *Pocula crebra*, etc.: C. Titius 'vir aetatis Lucilianae,' in Macrob. sat. III 16 15 says of prodigals *ludunt alea studiose, delibuti unguentis, scortis stipati*; and all these preparations are here made for the *scorta*: copa 37 *Pone merum et talos*; Plaut. curc. 354 *Postquam cenati atque appoti, talos poscit sibi in manum, Provocat me in aleam ut ego ludam. pono pallium, Ille suum anulum opposivit*; most. 308 *Age accumbe igitur ...appone hic mensulam: Vide, tali ubi sint: vin unguenta* cet.; Hor. epist. II 2 56 *venerem convivia ludum*; Juv. XI 176 *alea turpis*: 179 *Nostra dabunt alios hodie convivia ludos*; Iul. Capitol. Verus 5 *post convivium lusum est tesseris*; [Justin. XII 3 *conviviumque iuxta regiam magnificentiam ludis exornat*;] Cic. pro Caelio 39 joins *non aequalium studia, non ludi, non convivia*, as if they naturally came together; and 46 *studia delectationis, ludus iocus convivium.* What too are the *convivalia ludorum oblectamenta addita epulis*, which Livy XXXIX 6 8 speaks of as first brought to Rome by the army of Asia? the *ludi* in fact together with the things mentioned in the next v. were for the *comissatio* after the feast, 'cum furit Lyaeus, Cum regnat rosa, cum madent capilli'. **1132** comp. Plaut. asin. 803 *Tum si coronas serta unguenta iusserit* cet.; [Turpilius 201 *Coronam mensam talos vinum, haec huiusmodi, Quibus rebus vita amantum invitari solet.*] *coronae* chaplets for the head, *serta* festoons or garlands to deck the doorways or other parts of the house perhaps; but Tib. I 7 51 *nitido stillent unguenta capillo, Et capite et collo mollia serta ferat*; and Ov. met. IV 7; XIII 929. **1133** comp. Ov. met. VII 453 *usque adeo nulla est sincera voluptas Sollicitique aliquid laetis intervenit.* *Nequiquam quoniam*: the fondness of Lucr. for this expression, used in this way, is very striking: we had it just above 1110, it recurs below 1188; and it is found five times between V 1127 and 1332, where the poet is discoursing on the vanity of human wishes and efforts. It sounds like an echo of his own feeling, that the things which men most desire are all vanity. Hirt. de bell. Gall. VIII 19 6 *nequiquam: nam...*: [comp. *frustra, nam* in Catull. 21 7, and *frustra, namque* of Horace and Martial quoted by Ellis there.] **1135** *remordet*: see n. to III 827. **1136** *lustris*: Cic. Phil. II 6 *vino lustrisque confectus*; Livy XXIII 45 2 *vino et scortis omnibusque lustris per totam hiemem confectos*; Plaut. curc. 508 *lustris lacerant homines.* **1137** *in amb. rel.*: Hor. epist. I 16 28 *Servet in ambiguo.*

1141—1191: if there are such evils in prosperous, what must be the evils of unsuccessful love? strive then not to fall into love; but if you are caught, use all efforts to escape: yet men stand in their own way, and deluded find beauties even in defects; the discarded lover will refuse all comfort; who yet, if received back, will find out his folly and be glad to get away again. **1141** *proprio* in this sense of lasting is very common; Plaut. most. 224 *fore tibi victum sempiternum Atque illum amatorem tibi proprium futurum in vita*; corp. inscr. 1010; Accius 159; Lucil. XXVII 6 Muell.; Livy XXII 37 5. *secundo* and *adverso amore* are illustrated by Bentl. from Tibullus and Propertius. **1142** *inopi*=ἀμηχάνῳ. ἆ δυσέρως τις ἄγαν καὶ ἀμάχανός ἐσσι. **1143** has the look of a proverb. **1150** *obvius obstes*: comp. *obvius obtulit, officere atque obstare* and the like. **1152** *petis*: Livy XL 4 3 *multis petentibus, aspernata nuptias est*; XLII 12 3 *Seleuci filiam duxisse eum non petentem, sed petitum ultro*; 16 9 *uxoris petendae praematuram festinationem fratri obiceret.* *vis*: Plaut. trin. 1160 *quod vis non duces*; Mart. III 11 6 *Si non vult Quintus Thaida, Sextus ames.* **1153** *faciunt*: see n. to 1112. **1157** *süadent* is very unusual; but in Sulpic. Apollin. periocha to Ter. Andr. 8 the mss. have *Davi süasu*; and Plaut. curc. 508 *süadendo*, Epid. III 2 19 *süasi* are possible though uncertain scansions: he uses *suesco* and *suetus* indifferently as dissyll. or trisyll.; *dissolüo* etc. oftener than *dissolvo*; *reliqüus* always; V 679 *conseqüe*; VI 552 and 868 *aqüae*; VI 1072 *aqüai.* **1160** foll. comp. Theocr. id. VI 18 ἦ γὰρ ἔρωτι Πολλάκις, ὦ Πολύφαμε, τὰ μὴ καλὰ καλὰ πέφανται.

1160 *Nigra* cet.: 'Plut. Mor. 45 a τὸν δὲ ὠχρὸν ὑποκοριζόμενος μελίχρουν' J. E. M.: Theocr. X 26 Σύραν καλέοντί τυ πάντες, Ἰσχνὰν ἁλιόκαυστον, ἐγὼ δὲ μόνος μελίχλωρον: with this and what follows comp. the terms of the ἐραστοῦ ὑποκοριζομένου in Plato rep. V p. 474 D: Lucr. has been imitated by Ovid ars II 657 foll. and translated by Molière le misan. II 5 near end: comp. too Hor. sat. I 3 43 foll.; as later on he imitates Lucr. much. *melichrus* occurs more than once as a term of praise in the anthology, and apparently means the same as μελίχλωρος: Ovid l. l. *fusca vocetur, Nigrior Illyrica cui pice sanguis erit*; Molière *La noire à faire peur, une brune adorable.* *inmunda* cet.: Molière *La malpropre sur soi...Est mise sous le nom de beauté négligée.* **1161** *Palladium*: Cic. de nat. I 83 *caesios oculos Minervae*; Ovid. l. l. *si rava, Minervae* i.e. similis. *lignea*: Catull. 23 6 *Et cum coniuge lignea parentis.* **1162** *Parvula*: Ovid l. l. *Dic habilem quaecumque brevis.* *merum sal*: Bentl. quotes Afranius 30 *quidquid loquitur, sal merum est*: of course neither Bentl. nor I supposed that *sal* here had any special reference to speaking: it is 'esprit,' brilliancy generally; as in Catull. 86 4 *Nulla in tam magno corpore mica salis*; [Mart. VII 25 3 *Nullaque mica salis nec amari fellis in illis Gutta sit.*] **1165** *loquacula* seems not to occur elsewhere. **1166** *eromenion* is found in the anthology. *cum vivere* cet.: Ov. l. l. *Sit gracilis, macie quae male viva suast*; Lucil. II 20 *vix vivo homini ac monogrammo.* **1168** *At tumida*: Ov. l. l. *quae turgida, plenam*: Ov. rem. 327, to cure love, *Turgida, si plena est; si fusca est, nigra vocetur: In gracili macies crimen habere potest.* *mammosa* etc.: his constant imitator Arnobius III 10 *ab Iaccho Cererem, musa ut praedicat Lucretia, mammosam*, VI 25 *Ceres mammis cum grandibus*: the constr. seems to be *tumida et mammosa est Ceres ipsa* (tumida et mam.) *ab Iaccho*: some legends made Iacchus son of Demeter and brother of Cora; sometimes too, as here, he was represented as an infant at the breast: so Suidas Ἴακχος· Διόνυσος ἐπὶ τῷ μαστῷ: Gerhard in his Bilderkreis von Eleusis I anm. 70 and others illustrate from works of art Demeter κουροτρόφος, suckling an infant at the breast. Iacchus is oftener represented as son of Cora. **1169** *Silena* appears to be invented by Lucr. *satura*: Hesych. σατύραν· καταφερῆ. *labeosa* seems not to be found elsewhere: *labeosa*, as also *labea*; but *labium*: see Lach. and Schuchardt vulg. Lat. II p. 40. **1171** *esto iam*: see n. to I 968 *si iam.* **1173** *Nempe, nempe, Nempe, facit, facere*: comp. *Adde, Adde* and the like. **1174** *eadem turpi*: see n. to III 1038. **1175** *suffit*: Prop. IV (V) 8 83 *quemcumque locum externae tetigere puellae Suffit.* **1178** *Floribus et sertis*: strewing perhaps the lower *limen* or sill with loose flowers, and hanging the upper or lintel with festoons: Ovid ars II 527 *Postibus et durae supplex blandire puellae Et capiti demptas in fore pone rosas*; III 72 *Sparsa nec invenies limina mane rosa*; rem. 32 *Et tegat ornatas multa corona fores*; Prop. I 16 7 *mihi non desunt turpes pendere corollae*; Juv. VI 51 *necte coronam Postibus et densos per limina tende corymbos*; Augustus in his res gestae VI 16 *laureis postes aedium mearum vincti sunt publice coronaque civica super ianuam meam fixa est*: or it may be a hendyadis for *floridis sertis*: Tib. I 2 14 *cum posti florida serta darem*; Catull. 63 65 *Mihi ianuae frequentes, mihi limina tepida, Mihi floridis corollis redimita domus erat.* *postis Unguit amarac.*: 'my beloved put in his hand by the hole...I rose up to open to my beloved, and my hands dropped with myrrh and my fingers with sweet smelling myrrh upon the handles of the lock. I opened to my beloved'. *superbos*, haughty and unrelenting as their mistress. **1179** *foribus* cet.: Aen. II 490 *Amplexaeque tenent postes atque oscula figunt*; [Callimachus (see Hermes X p. 4—6) Ἐλθὼν δ' οὐκ ἐβόησα, τίς ἢ τίνος, ἀλλ' ἐφίλησα Τὴν φλίην.] **1180** *venientem* follows on the *iam amm.*, coming after leave given; exactly as 1177 *lacrimans exclusus* is weeping because shut out: a copula, instead of being necessary, would be very awkward. **1181** *modō*: see n. to II 1135. **1182** *cadat*: Wak. compares Virg. geor. III 138 *Rursus cura patrum cadere*; but there the force of the word is not very clear; see Conington: *cadat* is perhaps like II 1175 *incassum cecidisse*; see Forc. **1183** *Stultitia*: '*damnatur* aliquis *crimine* vel *iudicio*, sed *sceleris parricidii furti iniuriae.* in Ciri 188 quod habent exemplaria *tanto scelere damnare puellam* neque modulatum est neque Latinum' Lach. He states correctly the usual Latin constr.; but N. P. Howard justly refutes his alteration by citing Cic. Phil. XIII 27 *quo scelere damnatus*: comp. too Suet. Otho 2 *damnatum repetundis consularem virum.* The same rule holds of *arguo, convinco*; yet Sen. Herc. Oet. 898 *Si te ipsa damnas, scelere te, misera, arguis*; Oed. 916 *se scelere convictum Oedipus Damnavit ipse*; Suet. Nero 31 *scelere convictos*: Tac. ann. I 74 *maiestatis postulavit*; but III 38 *postulaverat repetundis*; Aen. II 229 *scelus expendisse* = XI 258 *scelerum poenas expendimus.* **1186** *poscaenia*: the Latins often said *pos* or *po* before many consonants, *pos tempus posquam pomeridianus* and the like: Ribbeck I see repeatedly introduces such forms into Virgil; see notes 1 to 1252: Cic. orator 157 prefers *posmeridianus* to *postmer.*, and Livy XLII 10 5 the ancient and sole ms. has *posquam.*—Yet Mommsen, ephem. epigr. I p. 78, I find says '*pos* quod est pro *post* sequente denuo littera *t*, quem solecismum hodie multi religiose magis colunt quam erudite, diplomata ad Marcum usque ignorant, ab a. inde 216 perpetuo scribunt *postemplum*, ut hoc scribendi vitium appareat monumenta publica invasisse aetate Severi et Caracallae.'

1192—1208: yet women sometimes feel true love in return.

1195 *facit ex animo*: Ter. Andr. 794 *ex animo omnia, Ut fert natura, facias an de industria.* **1196** *spat. dec. am.*: III 1042 *decurso lumine vitae*; Ov. trist. III 4 33 *pede inoffenso spatium decurrere vitae.* **1199**

Si non . . quod: see n. to I 176. *illorum* neut. may mean the females, according to Lucretius' usual practice when the reference is to different genders *volucres armenta* cet. *subat* in good writers seems always to be said of the female in heat. **1205** *Quom interea* seems a harsh elision; and none other like it is found in Lucr.; for II 850 *Quoad licet* is a synizesis: Virg. ecl. III 48 *Si ad vitulam*, and this eclogue appears to be one of his earliest; in Catullus such elisions are frequent; 64 305 he has *Cum interea*, as Lucr. here: 809 *contendere se atque parare*, the elision seems to have a similar effect; and 1145 *cavereque ne inliciaris*. [Comp. Lucil. XI 13 *non contemnere se et* cet. But probably *quom interea* 'while all the time' was so common a phrase that the words could not well be separated: for this use of *quom interea*, *interim* see Autenrieth die conj. *quom* p. 286 E.] *val. Ven. com.*: 1148 *validos Veneris perrumpere nodos*. **1207** *iac. in fr.*: 817 *nos in fraudem induimus*.

1209—1232: according as the seed of the man or woman prevails at conception, the child is more like to the one or to the other; and this is so whether the child be male or female. **1209** *comm.* cet. i.e. comm. semine suo virili semine: but *commiscendo semen* would make the constr. simpler and be perhaps more in the manner of Lucr.: comp. I 1026, III 1087, V 722. **1210** *vim vicit vi*: in a very similar passage of Hippocr. de genit. 7 *ἐκρατέετο* is used in the same way; comp. too Plut. de plac. phil. V 11 where it is given as a stoical doctrine, *κἂν μὲν ἐπικρατήσῃ τὸ τῆς γυναικός, ὅμοιον εἶναι τὸ γεννώμενον τῇ μητρί, ἐὰν δὲ τὸ τοῦ ἀνδρός, τῷ ἀνδρί*: Censor. de die nat. 6, p. 16 13 refers this theory to Anaxagoras: *Anaxagoras autem eius parentis faciem referre liberos iudicavit, qui seminis amplius contulisset.* Epicurus may have got this as many other things from him; but Hippocrates, whom Lucr. had evidently studied, de genit. 7 and 8 teaches precisely the same; comp. especially 8 *ὁκότερος δ' ἂν πλέον ξυμβάληται ἐς τὸ ἐοικέναι καὶ ἀπὸ πλεόνων χωρίων τοῦ σώματος, κείνῳ τὰ πλείονα ἔοικε· καὶ ἔστι ὅτε θυγάτηρ γενομένη ἔοικε κάλλιον τῷ πατρὶ ἢ τῇ μητρὶ καὶ κοῦρος γενόμενος ἔστι ὅτε κάλλιον ἔοικε τῇ μητρὶ ἢ τῷ πατρί*: Lactant. de opif. dei 12 closely copies Lucr. but attributes the theory to Varro and Aristotle: *cum semina inter se permixta coalescunt, si virile superaverit, patri similem provenire, seu marem seu feminam; si muliebre praevaluerit, progeniem cuiusque sexus ad imaginem respondere maternam.* **1211** *matrum*, *Ut patribus*: Cic. de fin. V 12 *patri similis esse filius*; where Madvig thinks *patris* to be perhaps right, as Cicero and the older writers usually have a gen. of living things, especially men and gods, while with inanimate things the gen. and dat. are employed promiscuously: the dat. in later writers became almost universal: 1218 Lucr. has *similes avorum*; II 909 *simili totis animalibus*; IV 1230 *utri similest id*, neut. but referring to a living child: Madvig l. l. quotes Cic. de nat. deor. II 149 *plectri similem linguam nostri solent dicere, chordarum dentes, nares cornibus iis qui* cet. where,

as in Lucr., both cases are found together: 'Plaut. Men. 1089 *Neque aqua aquae neque lacte lacti* (mss. *lactis* Ritschl), *mihi crede, usquam similiust, Quam hic tui est tuque huius autem*' J. E. M.; [Amph. 595 *Neque lac lacti magis est simile quam ille ego similis est mei.*] **1213** *vulta*: Nonius p. 230 quotes this v. and from Ennius *vostraque vulta*. **1216** *confl.* is active in Cic. de inv. II 126. **1217** *neque utrum* i.e. neutrum: so V 839 *nec utrum*; Mart. V 20 11 *necuter*; Orell. inscr. 4859 *in . necutro . mihi . consto*: *neuter* is only *ne* or *nec uter*; *ne* or *nec* being the old negative; see n. to II 23. **1220** *Propterea* cet.: Aristotle, who discusses these very questions de gen. anim. IV 3 p. 769 1 foll., finds them all more difficult to answer than Lucr. does: so l. l. 24 *διὰ τίν' αἰτίαν ἐοικὸς γίνεται τοῖς προγόνοις ὡς ἐπὶ τὸ πολὺ καὶ τοῖς ἄποθεν; οὐ γὰρ ἀπ' ἐκείνων γ' ἀπελήλυθεν οὐθὲν τοῦ σπέρματος.* **1225 (1227)—1228 (1226)** must come in the order here given; for surely *voltus vocesque comasque* are comprehended in *facies et corpora membraque*; and if they were not, what reason could there be for the poet's asserting that they are as uncertain in their origin, as the body generally? just as if any body were likely to think that the less essential were more unvarying than the more essential: this indeed induced Lamb. to read *minus* for *magis*. Again, as Lach. says himself, *de semine certo* is here *aut virili aut muliebri*, one not both; and is opposed to 1229 *duplici de semine*, and forms a contrast with it: 1225 (1227) in fact begins a new question, which Arist. l. l. thinks it not easy to explain; why namely a male child may be more like the mother, a female like the father. **1225** *patrio*, i.e. as well as *materno*. **1226** *Materno*, i.e. as well as *patrio*. **1227** *haec*, i.e. the distinctions of sex no more come *certo semine*, from either the father's or the mother's alone, than the form and features: Hippocr. l. l. emphatically asserts the same: thus 7 *οὗτος ὁ λόγος αἱρέει καὶ τὸν ἄνδρα καὶ τὴν γυναῖκα ἔχειν καὶ θῆλυν γόνον καὶ ἄρσενα*, and 8 at end *καὶ ταῦτά μοι καὶ τοσαῦτά ἐστι ἱστόρια τῷ προτέρῳ λόγῳ, ὅτι ἔνεστι καὶ ἐν τῇ γυναικὶ καὶ ἐν τῷ ἀνδρὶ καὶ κουρογονίη καὶ θηλυγονίη*: comp. this with Aristotle's doubts and difficulties. **1231** *possis*: see n. to I 327. **1232** *virum suboles* would commonly mean the whole male sex; so in Cic. *omnem iuventutis subolem* = omnem iuventutem; *proles illa futurorum hominum* = futuri homines; and Virgil has *prolem parentum* for the stock to which the parents belong; Pliny *Sarmatae Medorum suboles*, of the same stock as the Medes; Ov. fasti I 449 *volucrum proles*; Lucr. himself II 662 *equorum duellica proles*; V 856 *procudere prolem* = 850 *procudere saecla*, their race; and III 741 *triste leonum seminium* = tristes leones, where see note; IV 998 *catulorum blanda propago* = catuli blandi. But here *virum suboles* means one out of the male sex; what Livy I 1 11 calls *stirps virilis*; and comp. his *nullam stirpem liberum, ex tanta stirpe liberum, ex magna progenie liberorum*, all within a few chapters in XLV. Exactly thus Hor. od. 13 8 *Lascivi suboles gregis* means one out of the

suboles lascivi gregis i.e. a kid; for *lascivus grex* cannot mean anything but the young kids; Apul. met. x 32 *innuptarum puellarum decorae suboles*: in no other way can I understand *sanguis meus, genus deorum, deum gens* and the like, than as meaning belonging to my blood, one of the race of gods etc.; Aen. x 228 *deum gens, Aenea* seems synon. with VIII 36 *sate gente deum*: so too I understand VI 792 *divi genus* compared with *divum genus*; and Lucr. I 42 *Memmi propago* compared with IV 998 *catulorum propago*. *origo* has here the meaning of *partus* or birth: perhaps *mul. or.* is literally the beginning of a woman.

1233—1277: it is not the gods who grant or withhold offspring: conception depends on the due assortment of man and wife. **1233** *cuiquam Absterrent*: see n. to 1064. **1236** *Quod* cet.: VI 1015 *Quod facit et sequitur*. **1237** *adolent*: Aen. V 54 *strueremque suis altaria donis*, XI 50 *cumulatque altaria donis* being compared, this ambiguous word would seem to have the sense here of causing to grow, increasing, and so piling up: Virg. geor. IV 379 *Panchaeis adolescunt ignibus arae*, *adolescunt* seems to be its neut., 'grow' or 'are piled up'; but in Lucr. 'cause to smell' or 'burn' would give a suitable sense; see Conington to Virg. ecl. VIII 66. The notion of increase would appear to be the most natural, if the word had come to be merely one of good omen and conveyed only a conventional meaning to a Latin ear; as it would seem to have done to Tacitus', who in ann. XIV 30 has *cruore captivo adolere aras*; in VI 28 *subire patrium corpus inque solis aram perferre atque adolere*. However Ov. met. I 492 *adolentur*=simply *uruntur*. **1239** *sortis*: Juv. I 82 *sortesque poposcit*: Cic. de div. II 86 says *hoc quidem genus divinationis vita iam communis explosit. fani pulchritudo et vetustas Praenestinarum etiam nunc retinet sortium nomen, atque id in volgus*: these *Praenestinae sortes* he describes l. l. 85 as *in robore insculptas priscarum litterarum notis*: Ritschl Rhein. mus. n. f. XIV p. 389 foll. amends and explains some very singular old hexameters, containing a series of *sortes*, such as these must have been. *fatigant*: II 1172 *caelumque fatigat*. **1242** *locis adf. adh.* seems not unlike Aen. IX 536 *Et flammam adfixit lateri*; [Plaut. Amph. 858 *Huc...adventum adporto*.] **1244** *his* i.e. aliis, with reference to 1240 *partim*. **1246** *penetratum*, because *penetro* and *penetro me in* are equally in use. **1250** *Succipiunt*: V 402 *succepit* A: Ribbeck admits this form four times into the Aeneid with more or less ms. authority; and Servius thrice repeats that *succipio* is the old form. *ingravescunt* seems not to occur elsewhere in this sense of becoming big with child. **1252** *unde* i.e. eas ex quibus. *puellos*: Nonius p. 158 quotes this v. and Ennius Lucilius and Varro for this form. **1254** *fecundae*: the wife may be able to bear and the man to beget; but they may not suit one another; though in another marriage the man may have children. **1259** *lĭquidis et līquida*; see n. to II 452: the juxta-position here seems almost as

bold as Homer's Ἆρες Ἄρες which Martial IX 11 15 thinks utterly impossible in Latin; Bekker finds it so in Homer as well; but the poets seem often to feel a pleasure in such contrasts of quantity: III 145 *Idque sibī...id sibĭ gaudet*; Tib. II 3 27 *Delos ubī...ubĭ Delphica Pytho*; Prop. II 3 43 *ostendet ĕois, Uret et ēoos*; Martial himself IV 89 1 and 9 *ōhe iam satis est, ŏhe, libelle*; II 18 1 *Captŏ tuam, pudet heu, sed captō*; I 36 1 *Si, Lucane, tibi vel si tibi, Tulle*; VII 60 7 *Te pro Caesare debeo rogare, Pro me debeo Caesarem rogare*; [XI 12 2 *Dum matrem nemo det tibi, nemo patrem*.] With a short vowel before a mute and liquid this variation is even more frequent: IV 403—406 *sūpra, sŭpra, sūpra*; 1222 *Quae pătribus pātres*, as Aen. II 663 *Gnatum ante ora pătris, pātrem qui*: in these three instances too as well as in one from Martial the lengthening as well as the shortening is in the thesis of the foot: V 839 *interŭtrasque nec ūtrum ūtrimque*; 1163 *sācra, săcra*; Ov. met. XIII 607 *volŭcri mox vera volūcris*; V 129 *ditissimus āgri, Dives ăgri*; Hor. od. I 32 11 *Et Lycum nīgris oculis nĭgroque*: Theocr. VI 19 τὰ μὴ κᾰλὰ κᾱλὰ πέφανται; VIII 19 ἶσον κάτω ἶσον ἄνωθεν; and Callimachus has the very same variations; for which they and their Alexandrine compeers are bitterly assailed by Cobet var. lect. p. 396; but they have greater crimes than these to answer for: Theocr. XVIII 51 Εὐτεκνίαν, Κύπρις δὲ θεὰ Κύπρις. **1262** *extenvantur*: so *tenvis* he uses oftener than *tenŭis*; but I 317 *adtenŭari*. **1271** *exossato*: Apuleius twice uses *exossa saltatio* in the same sense. **1272** *Eicit*: III 877 *et eicit*, where see note. **1274** *Idque moveri*: comp. III 569 *moventur Sensiferos motus quos...haut possunt...moveri*; for the neut. pron. is equivalent to a cognate accus.: VI 404 *quid undas Arguit?*

1278—1287: often by her own virtues, from no divine interposition, a woman without personal attractions will endear herself to her husband. **1278** *Nec divinitus*: οὐδὲ θεόπεμπτον εἶναι τὸν ἔρωτα is a saying of Epicurus recorded in Diog. X 118. **1282** *insuescat te*: VI 397 *An tum bracchia consuescunt*; V 1368 *fructusque feros mansuescere terram*, a conjecture of Lach. but I think a certain one: Hor. sat. I 4 105 *insuevit pater optimus hoc me*; II 2 109 *adsuerit mentem corpusque superbum*; Aen. VI 832 *ne tanta animis adsuescite bella*; Varro de re rust. II 1 4 *silvestria mansuescerent*; Titinius 46 *desuevi* i.e. eum *ne*; Columella thus uses *consuesco* and *insuesco*, each more than once. The passive partic. *suetus adsuetus desuetus consuetus mansuetus* are much more in use; see n. to III 772. **1283** has a proverbial sound: comp. the use of *consuesco*; and Livy XXXIX 9 6 *huic consuetudo* cet. and 7 *eo profecerat consuetudine capta...ut unum Aebutium institueret heredem*: Ov. ars II 345 *Fac tibi consuescat: nil adsuetudine maius*. **1286** *guttas* cet.: a common-place employed by Tibullus Propertius and Ovid; comp. too I 313 *Stilicidi casus lapidem cavat*.

BOOK V

1—54: who, o Memmius, can adequately extol the man who discovered this system of true wisdom? not Ceres, not Liber, far less Hercules can be compared with him: they only gave to men physical comforts or freed them from physical dangers: he bestowed on us the blessings of right reason and freed us from the far worse terrors of superstition and of the passions: surely then he deserves to be ranked as a god, the more so that he first explained the true nature of the gods.

1 *Quis potis* cet.: Enn. ann. 178 *Quis potis ingentis oras evolvere belli?*: Lucr. omits the verb subst. with *pote*; but not with *potis*, as Ennius Plautus etc. do. *dignum pro*: Cic. in Caec. div. 42 *timeo quidnam pro offensione hominum...et expectatione omnium et magnitudine rerum dignum eloqui possim*: nay Cicero's words may have been in the poet's mind: Ter. hec. 209 *an quicquam pro istis factis dignum te dici potest?*; Sall. Catil. 51 8 *si digna poena pro factis eorum reperitur*; and perhaps Hor. epist. I 7 24 *Dignum praestabo me etiam pro laude merentis.* *poll. pect.*: I 414 *Lingua meo suavis diti de pectore fundet*; see n. there: IV 914 *Vera repulsanti discedas pectore dicta*; and, just below, 5 *Pectore parta suo* cet.: Ov. fasti II 120 *Vellem, Maeonide, pectus inesse tuum.* **2** *Condere*, the technical word, even in prose; see Forc.; hence Virg. ecl. II 4 *haec incondita*; and Livy *incondita carmina, inconditi versus*, and the like. **5** *parta* and *quaesita* appear to be synon.; see n. to IV 274: [but Mueller Lucil. II 30 (p. 201) says it is a ὕστερον πρότερον.] **7** *cognita*: Tib. IV 11 *cognita virtus*; Livy VII 40 19 *cognitae fidei.* **8** *deus* cet.: Virg. ecl. V 64 *deus deus ille, Menalca*; [Stat. silv. IV 6 36 *deus ille, deus*:] see n. to II 1092, and comp. Cic. Tusc. disp. I 48 quoted there. *incl. Memmi*: see n. to II 1080. **10** *appell. sap.*: Enn. ann. 227 *Nec quisquam sophiam, sapientia quae perhibetur, In somnis vidit priu' quam sam discere coepit*, imitated by Afranius in Gell. XIII 8 *Sophiam vocant me Grai, vos sapientiam.* *quique per artem*: Virg. geor. I 122 *primusque per artem Movit agros*: Aen. X 135 *quale per artem*; Manil. I 51 *primique per artem* cet.; for *princeps* belongs also to *quique per artem*: *artem* = rationem 'quam licet, si volumus, appellemus artem' says Cic. de orat. II 148. **12** *tranquillo*: *tranquillum* is the proper term for a calm, used by Cicero and the best writers, and often metaphorically as here: so Livy III 14 6 *nec cetera modo tribuni tranquillo peregere*; XXVIII 27 11 *ita aut tranquillum aut procellae in vobis sunt*; Ter. eun. 1038 *esse amorem omnem in tranquillo*: Lucil. in Nonius p. 388 has *te in tranquillum ex saevis transfer tempestatibus*: comp. also Plut. max. c. princ. viris 3 p. 778 C

Ἐπίκουρος τἀγαθὸν ἐν τῷ βαθυτάτῳ τῆς ἡσυχίας ὥσπερ ἐν ἀκλύστῳ λιμένι καὶ κωφῷ τιθέμενος. **13** *Confer enim*: so Cicero *attende enim paulisper; audiamus enim Platonem* and the like. *divina antiqua reperta*: 490 *altaque caeli . . fulgentia templa*; 24 *Nemeaeus magnus hiatus Ille*; 32 *Aureaque Hesperidum fulgentia mala*; 295 *claraeque coruscis Fulguribus pingues taedae*; 663 *Idaeis montibus altis*; 1063 *Inritata canum magna Mollia ricta, duros nudantia dentes*: so *candens lucidus aer, miserandum magnopere unum Aerumnabile*; also 1436 *magnum versatile templum*; II 7 *bene quam munita tenere Edita doctrina sapientum templa serena*; IV 212 *serena sidera radiantia*; 624 *Umida sudantia templa*: see also n. to I 258 *candens lacteus umor*: two participles are also found, as IV 1177 *lacrimans exclusus*, 1180 *iam ammissum venientem.* **14** *Namque* or *nam* introducing the details of a general statement is common enough in Latin, though less so than γάρ in Greek. *Ceres . . mort. inst.*: probably imitated by Virg. geor. I 147 *Prima Ceres ferro mortalis vertere terram Instituit*; yet the exact force of *instituisse* in Lucr. is not very clear: is it merely 'introduced and set up'? as Cic. ad fam. XIII 48 *eà te instituere quae sequantur alii*: or does it imply the planting also of the vine and sowing of the corn? as Cic. de lege agr. II 67 *iugera ccc, ubi institui vineae possunt*: Aen. VI 69 *Tum Phoebo et Triviae solido de marmore templum Instituam festosque dies de nomine Phoebi*, the word seems to have a similar literal and metaphorical sense. **15** *Vitigeni* recurs VI 1072; *vitigeneus* is the usual form of the adj.

[**22** *Herculis*: Nettleship (Suggestions on the Aeneid p. 40) 'Hercules the god whom the Stoics, now the supporters of Roman orthodoxy, delighted to honour, and whose merits Lucretius on the other hand postpones to those of Epicurus': (n. 2) 'on this point see Bernays Herakl. Briefe p. 45.'] **24** *Nemeaeus hiatus leonis*: see n. to I 474 *Alexandri Phrygio sub pectore.* **25** with rhythm comp. Virg. geor. III 255 *Ipse ruit dentesque Sabellicus exacuit sus.* **27** *vallata col.*: ciris 79 *Piscibus et canibusque malis vallata repente est*: Sen. Herc. Oet. 1193 1194 seems to refer to 24 and 27. **28** *tripectora* seems to be a ἅπαξ λεγόμ.: Virgil and others have *tricorporis.* *Geryonai*: Lucil. V 43 Muell. *Tiresiai.* **29** unless *Stymphala* agrees with a subst. in the lost v., it is an unusual form, like 31 *Ismara.* **30** *spir. n. ig.*: Virg. geor. II 140 *tauri spirantes naribus ignem*; Aen. VII 280 *geminosque iugalis . . spirantis naribus ignem*: Eur. Alc. 509 Hercules promises to bit them, εἰ μή γε πῦρ πνέουσι μυκτήρων ἄπο. **31** *Thracis*, the usual epithet to distinguish him from the other Diomede of whom Virg. Aen. I 752 says *Nunc quales Diomedis equi*: comp. Eur. Alc. 499 Θρῃκὸς τέτρωρον ἅρμα Διομήδους μέτα: Ovid met. IX 194 *Quid quod Thracis equos humano sanguine pinguis*, in the midst of a like enumeration of Hercules' labours; and Sen. Herc. Fur. 1169 *currus truces Thracis cruenti*; [Herc. Oet. 1789 *si quis Ismarius greges Thracis*

cruenti vindicat;] Hor. od. II 19 16 *Thracis et exitium Lycurgi.* *que* and *atque*, or *que* and *et* coupling two words as here, appear not to be found in Cicero or Caesar; but *que* and *et* are found in VI 1102 *Intempestivis pluviisque et solibus*; and are thus used by Terence, Sallust, Val. Maximus, Livy and the later writers; and Wagner quaest. XXXV 23 gives several instances from Virgil of *que* and *atque* thus used, as Aen. VIII 486 *Componens manibusque manus atque oribus ora*: Tac. ann. IV 34 *opibusque atque honoribus*; Ov. met. IV 429 *satisque Ac super*; [Livy XXVI 24 6 *iurisque ac dicionis.*] **33** *Asper* cet.: Macrob. sat. VI 1 30 compares Aen. IX 794 *Asper acerba tuens retro redit*: comp. too geor. III 149 *Asper acerba sonans*; Aen. VIII 330 *asperque immani corpore Thybris.* **35** *pelage* recurs VI 619: *mele* he also twice uses: Virgil has *cete.* *sonora* of Nicc. is confirmed by Stat. Achill. I 223 *Gurgite Atlanteo pelagi sub valle sonora*, cited by L. Mueller in Jahn's Jahrb. for 1866 p. 393; though it does not seem to me quite certain, as Statius clearly could not there use *severa*, which I still think well in place here. **36** *audet* i.e. adire, understood from *adit*: Caes. bell. Gall. IV 2 5 *ad quemvis numerum...adire audent*; [IV 20 3 *neque enim temere...illo adit quisquam*:] for omission of inf. comp. Cic. ad Att. IV 3 3 *occidit homines..ipsum cupivit*: unless *quo audet* resemble Aen. II 347 *audere in proelia*: Juv. II 2 has *quotiens aliquid de moribus audent.* [**39** foll. (with reference to Conington's remarks on this passage) even now in India thousands are killed yearly by tigers and serpents, though fewer of course than in Lucretius' time: see too Friedlaender, Sitteng. II p. 373, and Strabo quoted there, who says that whole countries, cultivated in his time, had before been uninhabited by reason of this terror.] **40** *scatit*, as VI 891; and *scatĕre* three times. **41** *silvasque profundas* are much the same as Virg. geor. II 391 *saltusque profundi*; the *saltus* are the lawns and long defiles sweeping down from the hills to the low valleys and plains; the *silvae* represent these more or less covered with wood: *nemora* and *silvae* are often found without distinction of meaning; but often too, as here, they are used together, even by Cicero; and then Servius to Aen. I 310 appears to define them correctly, '*nemus* composita multitudo arborum, *silva* diffusa et inculta': thus Ovid met. I 568 *Est nemus Haemoniae, praerupta quod undique claudit Silva: vocant Tempe*: this Livy XLIV 6 calls a *saltus*; and Enn. ann. 557 joins *silvarum saltus*: Livy IX 2 7 *saltus duo alti, angusti silvosique sunt.* Whoever has come Ἀρκαδίας ἀπὸ δειρᾶν καὶ πολυγνάμπτων μυχῶν, will understand this v. of Lucr.: the *silvae* ran up to and covered much of the *magni montes* of Greece and south Italy: 955 and 992 are nearly repetitions of this v.; comp. too 1386. **42** *est nostra pot.*: see. n. to II 53 *sit haec rationi' potestas.* **43** *purgatumst pectus*: VI 24 *Veridicis igitur purgavit pectora dictis.* **44** *quae proelia insinuandum*: see n. to I 111.

45 *scindunt* cet.: III 994 *Aut alia quavis scindunt cuppedine curae.* **47** *spurcitia* would seem to mean filthy lust: so Martial *spurcas lupas*, *spurcae Ledae* of harlots; and Plaut. capt. 56 *spurcidici versus inmemorabiles.* It may however be αἰσχροκέρδεια, sordid avarice: so Martial IV 56 3 *Sordidius nihil est, nihil est te spurcius uno, Qui potes insidias dona vocare tuas*; Cic. Verr. (2) I 94 *homo avarissime et spurcissime*: Nonius p. 393 gives as the first meaning of *spurcum*, saevum sanguinarium: Plaut. trin. 825 *te omnes saevumque severumque, avidis moribus, commemorant, Spurcificum immanem intolerandum vaesanum*; where it might have either of the last two meanings. **48** *lux. des.* found together Sall. Catil. 53 5 *postquam luxu atque desidia civitas corrupta est.* *desidiae* is also plur. Aen. IX 615 *Desidiae cordi*: Lucr. III 142 *Laetitiae*; Plautus in the trinummus has *parsimoniae* and *opulentiae*; ib. 509 the Ambrosian has *de stultitiis meis.* **49** foll. surely then the man who has subdued all these more frightful monsters, and delivered the mind, not the mere body, by reason and not by mere force, deserves to be deemed a god, if Hercules gained that distinction for the lesser exploits. **51** *numero divom esse*: 'post *numero* lege *in*' Bentl. who refers to 123 *Inque deum numero* and 180 *Nec fuit in numero*: and so I 446 *rerum in numero relinqui*, 691 *in numero rerum constare*; and Cicero *in numero esse deorum, hostium, iudicum* and the like, or *ex numero*: [Caes. b. Gall. VI 23 8 *in desertorum ac proditorum numero ducuntur*:] Quintil. *in numero veterum habere*, but III 6 102 *si esset numero alienorum*: Caes. bell. civ. III 110 4 *ut dato nomine militum essent numero*; [III 59 1 *erant apud Caesarem equitum numero Allobroges duo*: see Kraner (Hofmann) here: b. Gall. VI 21 2 *deorum numero eos solos ducunt, quos cernunt*; Pollio ap. Cic. epist. X 31 6 *quod familiarem meum tuorum numero habes*;] Livy IV 4 12 *ut hominum, ut civium numero simus*; 56 11 *non civium, non denique hominum numero essent*; XLIII 3 4 *uti numero colonorum essent*; XXXVI 35 9 *utrum hostium an pacatorum eos numero haberet*: again Cicero says indifferently *esse in loco, in numero*, or *loco, numero parentis*; *esse aliquo* or *in aliquo, nullo* or *in nullo numero*; and this sense easily shades off into the other: [see Draeger hist. synt. I p. 356 d.] Lactant. III 14 quotes the v. and strangely supposes Lucr. is praising Thales or Pythagoras. *dignarier* I take to be pass. according to the usage of Cicero and the older writers: Nonius p. 281 among other passages cites Cic. de orat. III 25 *quae tamen consimili laude dignentur.* The infin. after *dign.* which is unusual, he illustrates by 'Accius in Neoptolemo *sed quem mihi iungent cuique (?) dignabor dari*': comp. 65 *consistere* cet., though the infin. is not usual after *ratio reddunda*, but a gen. or a prepos. or a dependent clause, as 67 foll. **51** in the fragments of Philodemus περὶ εὐσεβείας tab. 66 after a long string of epithets in praise of Epicurus, ending with καὶ ἅγιον καὶ

ἁγιώτατον, is added διὸ καὶ μόνον μεγίστην εὐσέβειαν ἐζηλωκέναι φασὶ καὶ δοξάζειν ὁσιώτατα περὶ θεῶν. **53** *de divis*: 'quippe qui libros singulares scripsit περὶ θεῶν et περὶ ὁσιότητος' Bentl.: Cic. de nat. deor. I 115 *at etiam de sanctitate, de pietate adversus deos libros scripsit Epicurus*: they are often quoted in that work of Philodemus. **54** *pandere*: I 55 *rerum primordia pandam*; 126 *rerum naturam expandere dictis*.

55—90: following in his steps I teach the inexorable laws by which all things are bound: having proved the soul to be mortal and shewn how images in sleep cheat the mind, I go on to prove the world to be mortal and to have had a beginning, and to describe how all its parts were formed; what creatures sprang from the earth, what never existed; how fear of the gods fell upon men: the natural courses too of the heavenly bodies I will explain, that men may not fancy they are directed by the gods and be enslaved by religion. **55** Livy XXXVII 53 11 Eumenes says of his father *huius ego vestigia ingressus*. **58** *Nec valeant* i.e. quamque non valeant: but perhaps *Nec* rather connects what follows with what precedes in the way illustrated in n. to I 718. *validas valeant*: see n. to 826 *sonitu sonanti*. **59** *reperta est* i.e. in III. **61** comp. III 605 *Non modo non omnem possit durare per aevom*. **62** *simulacra* cet.: IV 34 foll.; comp. too I 133 *somnoque sepultis, Cernere uti videamur eos* cet.: as far as the general theory of images is concerned, this topic can form but a very small part of it; but morally speaking, to an epicurean it is the most important of all, as the great end of physics is to free men from religion and fear of death; hence the earnestness with which Lucr. insists upon it. *Sed* i.e. repertum est, understood from *reperta est*: comp. n. to 853. **63** *cum videamur*: see n. to III 736 *Cum subeant*. *quem vita reliquit* is the same as *qui vitam reliquit*: thus he says both *eum mortis letique potitum* and *quem mors et terra potita est*: Aen. VI 735 and Ov. met. XI 327 *vita reliquit*. **64** *Quod superest* begins the apodosis of the sentence which commenced at 55.

65—81: he here enumerates most of the subjects treated of in this book, which do not however all follow in the order observed in this summary: 65 66 these questions are discussed 235—415: 67 *Et quibus—Lunaique globum*, these in 416—508 and 534—563: 69 *tum quae—Extiterint*, this in 783—877: 70 *et quae—natae*, this in 878—924: 71 *Quove modo—nomina rerum*, this in 1028—1090: 73 *Et quibus—divom*, this in 1161—1240: 76 *Praeterea—ratione putemus*, these in 564—770.

67 *Et quibus* cet.: 416 *Sed quibus ille modis coniectus materiai Fundarit terram* cet. **70** *et quae nullo* cet.: 878 *Sed neque Centauri fuerunt, nec tempore in ullo Esse queunt* cet. **71** *Quove*: see n. to I 57. **72** *vesci*: Nonius p. 415 '*vesci* etiam significat *uti*': he quotes this passage and Aen. I 546 *si vescitur aura Aetheria*; from Pacuvius *arte hac vescimur* and *vescatur armis*; from Accius *armis vesci* and *vesci praemiis*; and Cic. de fin. V 57 *vesci voluptatibus*: *vesci* therefore = frui; and so 857 *quaecumque vides vesci vitalibus auris*. **75** *lacus*, such as the *Ampsancti valles*, 'i.e. omni parte sancti', as Servius says; the lake of Nemi, the 'speculum Dianae' of Aricia: Cic. Verr. V 188 *sanctissimae deae, quae illos Hennenses lacus lucosque incolitis*; IV 107 *Henna... quam circa lacus lucique sunt plurimi*; Livy XXIV 38 8 of the divinities of Henna, *qui hanc urbem, hos sacratos lacus lucosque colitis*; where *lacus* and *luci* come together as in Lucr.: Ov. ex Ponto II 10 25; [fasti III 263 *Vallis Aricinae silva praecinctus opaca Est lacus antiqua religione sacer*; Mart. IX 58 1 *Nympha, sacri regina lacus*: see too Sen. epist. 41.] **76** *solis* cet.: I 128 *solis lunaeque meatus Qua fiant ratione*; Aen. VI 849 *caelique meatus Describent radio*. **77** *flect. nat. gub.*: the metaphor from steering a ship: 107 *Quod procul a nobis flectat fortuna gubernans*; which comes to the same thing, as the epicurean nature is at one and the same time blind chance and inexorable necessity; VI 31 *Seu casu seu vi, quod sic natura parasset*, where *casu* and *vi* are different expressions for the same thing. **82—90** are word for word the same as VI 58—66, the last two vss. recurring again and again: indeed the whole of this paragraph 55—90 in character and manner much resembles VI 26—89, I 54—61, 127—135, IV 26—52 and some others: these are all introductions to what follows and have an awkward constrained and unfinished style about them, as if written against the grain in order to complete for the time what was wanting. In our passage of six and thirty lines the first one and twenty form a single long loose ill-assorted ill-constructed sentence; the last nine are word for word repeated elsewhere. All this is another proof that the author left his work in an unfinished state. **82** *qui didicere*: Hor. sat. I 5 101 declares himself one of these: *namque deos didici securum agere aevum*; and if we are to believe him in od. I 34 *Parcus deorum* cet., he proved the truth of Lucretius' *Si tamen interea mirantur* cet.: comp. too Ovid ars I 639 *Nec secura quies illos similisque sopori Detinet*. **87** *dominos acris* cet.: Cic. de nat. I 54 the epicurean Velleius says *inposuistis in cervicibus nostris sempiternum dominum quem dies et noctes timeremus; quis enim non timeat omnia providentem et cogitantem et animadvertentem et omnia ad se pertinere putantem curiosum et plenum negotii deum?* **89 90** see I 76 77.

91—109: well, as to the first question: this world and all its parts had a beginning and will have an end: nay, any moment you may see it all tumbling into ruin; may fortune avert this in our time! **91** *ne te in prom.* cet.: VI 245 *neque te in promissis plura morabor*. **92** *Principio*: see above 64 *nunc huc* cet. where this is the first point he promises to discuss. **93** *nat. triplicem* cet.: here he again emphatically dwells on the three great divisions of the world, which the poets have so often adopted from him as he from others: Ovid met. XII 39 *terrasque fretumque Caelestisque plagas, triplicis confinia mundi*; trist.

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110—145: but first let me declare with more than oracular certainty that this world and its parts are not immortal and divine: nay so far from its being impious to say that they are not godlike, they are the most fitting example of what is meant by inanimate and insensible: as we shewed in III, the soul and mind cannot exist away from the body; the world then being without life cannot be divine. **110** here, as Lach. has shewn, the argument is interrupted, and it is again taken up at 235 *Principio* cet.: 110—234 therefore are, like many other passages, subsequent additions: see what is said at II 165—183, where it is shewn that the subject of these vss. is closely connected with those and touches on questions not treated of elsewhere; and comp. especially V 155 *Quae tibi posterius largo sermone probabo*, a promise never fulfilled. Observe too that while a large proportion of these 125 verses are in the poet's noblest manner, about one-third of them are mere transcriptions of vss. from former books, shewing thereby that they were left by him in a provisional and unfinished state. **111 112**=I 738 739, where they are clearly more in place: here they sound somewhat pompous and inflated. **113** *exp. dictis*: Aen. III 379 and VI 759 *expediam dictis. doctis dictis*: see n. to II 987. **116** *Corpore divino* cet.: the whole of this reasoning is doubtless directed mainly against the stoics and their *anima mundi*; comp. the stoic Manil. I 247 foll. quoted by Creech, *Hoc opus...Vis animae divina regit* cet.; and Cic. de nat. II where the stoic Balbus discourses so largely on this head: 43 his conclusion is *sequitur ergo ut ipsa*, i.e. sidera, *sua sponte, suo sensu ac divinitate moveantur*: comp. with this what Lucr. says 78 *Ne forte haec inter caelum terramque reamur Libera sponte sua cursus lustrare perennis*: Balbus continues *nec vero Aristoteles non laudandus in eo quod* cet. the conclusion being *restat igitur ut motus astrorum sit voluntarius. quae qui videat, non indocte solum, verum etiam impie faciat, si deos esse neget.* Aristotle and the peripatetics whose teaching on these points is notorious, are doubtless therefore joined with the stoics by Lucr. and indeed Plato too who had called the stars created gods. **117** *Gigantum* cet.: the stoics who allegorised everything, doubtless gave this turn to the wars of the giants and Titans with the gods: comp. Cic. l. l. 70. **119** *Qui ratione* cet., as the epicureans, who we have just seen declared the world must one day perish, the stoics of course maintaining its immortality. Plut. de fac. lun. 6 says Cleanthes declared that the Greeks ought to prosecute Aristarchus of Samos for sacrilege, ὡς κινοῦντα τοῦ κόσμου τὴν ἑστίαν, because, to make theory accord with phenomena, he taught that the earth turned about its own axis and revolved in an annual orbit. **121** *notantes* i.e. ignominia, like censors or judges. **122** *Quae procul*: Lucr. now takes up the argument: *Quae* cet.=quamvis re vera haec usque adeo cet.: the *Quae* cet. refutes all that precedes from 114 to 121: the subjunctive is as regular, as II 87 *durissima quae sint* cet.; V 316 1357. [*Quae...distent* cet. is really connected with 114—116: *ne rearis...manere,...Quae distent* cet.; 117—121 being clearly parenthetical. For the subjunctive *distent* comp. Caes. b. civ. III 96 1 *ut facile existimari posset nihil eos de eventu eius diei timuisse, qui non.. necessarias conquirerent voluptates .at hi.. exercitui Caesaris luxuriem obiciebant, cui semper omnia ad necessarium usum defuissent*; b. Gall. IV 21 9 *Volusenus perspectis regionibus omnibus, quantum ei facultatis dari potuit, qui*

II 425 *Explicat ut causas rapidi Lucretius ignis Casurumque triplex vaticinatur opus*, imitated in the epic. de morte Drusi 361 *Ecce necem intentam caelo terraeque fretoque Casurumque triplex vaticinatur opus.* *tria corpora*: Ov. fasti I 105 *et quae tria corpora restant, Ignis aquae tellus*: and with the form of expression *triplicem, tria corpora, Tris species, tria* etc. comp. Cicero's vss. in de div. I 15 *Lentiscus triplici solita grandescere fetu, Ter fruges fundens, tria tempora monstrat arandi.* **95** *Una dies* cet.: Ov. amores I 15 23 *Carmina sublimis tunc sunt peritura Lucreti, Exitio terras cum dabit una dies*; comp. too Lucr. 1000 *Una dies dabat exitio*; and for the general thought II 1148 *magni quoque circum moenia mundi Expugnata dabunt labem putrisque ruinas.* **96** *ruet moles* cet.: Ovid met. I 256 *affore tempus Quo mare, quo tellus correptaque regia caeli Ardeat et mundi moles operosa laboret*; Lucan I 79 *totaque discors Machina divulsi turbabit foedera mundi*; Manil. II 807 *Dissociata fluat resoluto machina mundo*: [Tac. hist. IV 28 has *machinas molemque operum* in a different sense.] *moles et machina* Ovid l. l. intends to express by *moles operosa*: it is not only a vast mass, but a *machina*, a mass of complex and elaborate construction, formed by nature *daedala rerum.* **100** *ubi adportes*: see n. to II 41 *cum videas.* **102** *iacere indu* = inicere: see n. to I 82 *Indugredi*: these vss. are translated from Emped. 356 Οὐκ ἔστιν πελάσασθ' οὐδ' ὀφθαλμοῖσιν ἐφικτὸν Ἡμετέροις ἢ χερσὶ λαβεῖν ἧπερ γε μεγίστη Πειθοῦς ἀνθρώποισιν ἁμαξιτὸς εἰς φρένα πίπτει. *via munita*: as III 498 *et sunt munita viai*: it exactly expresses Empedocles' ἁμαξιτός, a regularly paved carriage-road. *fidēi*: Enn. ann. 342 *plenu' fidēi*; see n. to I 688 *rei.* **103** the *pectus*, in which are the *templa mentis*: IV 624 *Umida linguai sudantia templa*: III 140 *Idque situm media regione in pectoris haeret* explains the expression. **104** *dabit fidem*, for which Cicero says *faciet fidem*; and with him *tribuere fidem* = habere fidem, the very converse of this *dare fidem*: but, as Lucr., Ovid fasti II 20 *Nunc quoque dant verbo plurima signa fidem*; Pliny paneg. 74 3 *proinde dabat vocibus nostris fidem apud optimum principem, quod apud malos detrahebat*; Apul. met. IV 9, imitating Lucr., *res ipsa denique fidem sermoni meo dabit*: Ov. ex Ponto IV 8 36 *pro concessa verba salute damus* = facimus. *addere fidem*, for which Cic. has *adiungere fidem*, is common in this sense and further confirms what is said in n. to IV 41. **107** *flect. fort. gub.*: see n. to 77 *flectat natura gubernans.*

110—145: but first let me declare with more than oracular certainty that this world and its parts are not immortal and divine: nay so far from its being impious to say that they are not godlike, they are the most fitting example of what is meant by inanimate and insensible: as we shewed in III, the soul and mind cannot exist away from the body; the world then being without life cannot be divine. **110** here, as Lach. has shewn, the argument is interrupted, and it is again taken up

at 235 *Principio* cet.: 110—234 therefore are, like many other passages, subsequent additions: see what is said at II 165—183, where it is shewn that the subject of these vss. is closely connected with those and touches on questions not treated of elsewhere; and comp. especially V 155 *Quae tibi posterius largo sermone probabo*, a promise never fulfilled. Observe too that while a large proportion of these 125 verses are in the poet's noblest manner, about one-third of them are mere transcriptions of vss. from former books, shewing thereby that they were left by him in a provisional and unfinished state. **111 112** = I 738 739, where they are clearly more in place: here they sound somewhat pompous and inflated. **113** *exp. dictis*: Aen. III 379 and VI 759 *expediam dictis.* *doctis dictis*: see n. to II 987. **116** *Corpore divino* cet.: the whole of this reasoning is doubtless directed mainly against the stoics and their *anima mundi*; comp. the stoic Manil. I 247 foll. quoted by Creech, *Hoc opus...Vis animae divina regit* cet.; and Cic. de nat. II where the stoic Balbus discourses so largely on this head: 43 his conclusion is *sequitur ergo ut ipsa*, i.e. sidera, *sua sponte, suo sensu ac divinitate moveantur*: comp. with this what Lucr. says 78 *Ne forte haec inter caelum terramque reamur Libera sponte sua cursus lustrare perennis*: Balbus continues *nec vero Aristoteles non laudandus in eo quod* cet. the conclusion being *restat igitur ut motus astrorum sit voluntarius. quae qui videat, non indocte solum, verum etiam impie faciat, si deos esse neget.* Aristotle and the peripatetics whose teaching on these points is notorious, are doubtless therefore joined with the stoics by Lucr. and indeed Plato too who had called the stars created gods. **117** *Gigantum* cet.: the stoics who allegorised everything, doubtless gave this turn to the wars of the giants and Titans with the gods: comp. Cic. l. l. 70. **119** *Qui ratione* cet., as the epicureans, who we have just seen declared the world must one day perish, the stoics of course maintaining its immortality. Plut. de fac. lun. 6 says Cleanthes declared that the Greeks ought to prosecute Aristarchus of Samos for sacrilege, ὡς κινοῦντα τοῦ κόσμου τὴν ἑστίαν, because, to make theory accord with phenomena, he taught that the earth turned about its own axis and revolved in an annual orbit. **121** *notantes* i.e. ignominia, like censors or judges. **122** *Quae procul*: Lucr. now takes up the argument: *Quae* cet. = quamvis re vera haec usque adeo cet.: the *Quae* cet. refutes all that precedes from 114 to 121: the subjunctive is as regular, as II 87 *durissima quae sint* cet.; V 316 1357. [*Quae...distent* cet. is really connected with 114—116: *ne rearis...manere,...Quae distent* cet.; 117—121 being clearly parenthetical. For the subjunctive *distent* comp. Caes. b. civ. III 96 1 *ut facile existimari posset nihil eos de eventu eius diei timuisse, qui non.. necessarias conquirerent voluptates .at hi .. exercitui Caesaris luxuriem obiciebant, cui semper omnia ad necessarium usum defuissent*; b. Gall. IV 21 9 *Volusenus perspectis regionibus omnibus, quantum ei facultatis dari potuit, qui*

navi egredi ac se barbaris committere non auderet; v 4 3 *magni interesse arbitrabatur eius auctoritatem...valere, cuius tam egregiam in se voluntatem perspexisset. id tulit factum graviter Indutiomarus...et, qui iam ante inimico in nos animo fuisset, multo gravius hoc dolore exarsit*; v 33 2 *at Cotta, qui cogitasset haec posse..accidere atque..auctor non fuisset, nulla in re communi saluti deerat.*] **125** *Quid sit* i.e. quale illud sit, quod est. **128—141** with the exception of a word or two at the beginning and end, are the same as III 784—797 where they are clearly more in place than here. **145** *vitaliter* appears to be found only here.

146—194: the gods dwell not in the world, but apart in seats fine as themselves: their nature is not sensible to our bodily sense, but only to the finer sense of the mind: again to say that this world was created by the gods and will be eternal, and that it is impiety to gainsay this, is sheer folly: what could induce them to take such trouble? or what harm were it to us never to have been born? whence did the gods get the notion of man, so as to know how to make him? nay, this world and all in it was gradually formed by mere natural causes, as explained already. **146** foll. on the gods of Epicurus more will have to be said to 1161—1241 where he explains how the vulgar notions about the gods arose: comp. too what has been said at II 646 foll. *Omnis enim per se divom natura* cet. and the authorities there cited. That Epic. and Lucr. believed in these gods is certain, as there observed: no less certain are the difficulties in reconciling that belief with their general system. **147** *in mundi part. ullis*: the gods dwelt in *μετακόσμια*, which Cicero translates by *intermundia*: see n. to III 18 *sedesque quietae*. **149** *animi mente*: see n. to III 615: Velleius in Cic. de nat. I 48 says *hominis esse specie deos confitendum est. nec tamen ea species corpus est, sed quasi corpus, nec habet sanguinem, sed quasi sanguinem....Epicurus autem ..docet eam esse vim et naturam deorum ut primum non sensu sed mente cernatur, nec soliditate quadam*: again de div. II 40 we have the adversary's sarcastic description, *deos enim ipsos iocandi causa induxit Epicurus perlucidos et perflabilis et habitantis tamquam inter duos lucos sic inter duos mundos propter metum ruinarum; eosque habere putat eadem membra quae nos, nec usum ullum habere membrorum*: but, as Bentley says in his first Boyle lecture, 'if Epicurus and Democritus were in earnest about their philosophy, they did necessarily and really believe the existence of the gods'. **150** *suffugit*: Aen. II 12 *horret luctuque refūgit*; [x 804 *omnis campis diffugit arator*; geor. I 330 *fugere ferae*;] Hor. epist. II 2 171 *refūgit iurgia*; Sen. Herc. Fur. 1193 *Quid hoc? manus refūgit: hic errat scelus*: in all these cases the context is in the present. **151** *contingere* = tangere. **152** *Tangere* cet.; yet though a finer sort of touch, it is, as he shews in III, material touch by which the mind is affected as well as the body. And granting his pre-

misses, as well as what he next says, that their abodes are as fine as their bodies, their existence as he argues in 1161 foll. is known to us only by the images they send to the minds of men: these images must be much finer than the bodies of the gods which emit them: are these images immortal? if not, why are these gods, which are much finer than men and much grosser than their own images, imperishable? a dilemma surely, as they must be intermediate between things alike perishable: these *intermundia* too, as shewn in n. to III 18, are as numerous as the worlds in space, that is to say are innumerable: why are they all imperishable, while numberless worlds are hourly perishing? why do 'some rambling troops of atoms upon the dissolution of a neighbouring world', to use Bentley's words l. l., never come in contact with them? if by their fineness they elude destruction in this or that place through countless ages, can they do so in countless different places through countless ages? but there is no end to such questions: see the last chapters of Cic. de nat. deor. I.—In Philodemus *περὶ εὐσεβείας*. we find between tab. 105 and 123 many tantalising fragments which if perfect would doubtless throw much light on the nature of the epicurean gods: thus tab. 121, after stating that all *σώματα* are *τὰ μὲν συνκρίσεις, τὰ δ' ἐξ ὧν αἱ συνκρίσεις πεπόηνται*, exactly as do Lucr. in I 483 and Epicurus there quoted, he goes on *μήτε γὰρ ἀτόμους νομίζειν τοὺς θεοὺς μήτε συνκρίσεις* (*συνθέτους*?), and 122 *ἅπασαν τὴν σύνκρισιν φθαρτήν*. Probably therefore they attempted in regard to their gods to explain the inexplicable somewhat for instance as Lucr. I 599—634 comments on the parts of an atom, or II 216—293 on the minimum of declination: the gods were not *συγκρίσεις*, but quasi *συγκρίσεις*: their atoms had not come together so as again to be separated; but were in eternal juxta-position, etc. etc.

154 *de* = secundum, 'after the model of,' 'in conformity with': see Lorenz Plaut. most. 760: Menaech. 935 *de illis verbis: cave tibi: Immo Nestor nunc quidemst de verbis, prae ut dudum fuit*; 266 *iam aps te metuo de verbis tuis*; asin. 210 *meo de studio studia erunt vestra omnia*; [miles 1024 *de meis venator verbis*; Epid. 442 *Nam strenuori deterior si praedicat Suas pugnas, de illius illae fiunt sordidae*, where Goetz and others change the text wrongly: see Buecheler Rh. Mus. XXXVII p. 524 n. 1: (Priscian I p. 87 agrees with mss. of Plautus).] Comp. too Apul. met. VIII 8 *Thrasyllus praeceps alioquin et de ipso nomine temerarius*: *de* = de exemplo, de more, etc. as *ad* sometimes = ad exemplum, ad normam: '*tenues* de exemplo corporis eorum'. **155** *Quae tibi* cet.: this promise, as already observed, he has nowhere fulfilled.

156 *Dicere* cet.: again directed against the teleology of stoics and peripatetics: so the epicurean in Cic. de nat. deor. I 23 *an haec, ut fere dicitis, hominum causa a deo constituta sunt?* cet. **158** *Adlaudabile* seems not to occur elsewhere: Ritschl has expelled it from Plaut. Persa 673: *adl.* and *laudare* are designedly brought together. **161** *perp.*

aevo is abl. gov. by *fundatum*: founded on, that is, which is to exist for everlasting: Spartian. Sever. 22 *in aeternum pace fundata*; edict. Dioclet. Maxim. near beg. *ut nos..in aeternum fundatam quietem saepiamus*; Livy XLV 19 10 *regnum eorum novum, nullis vetustis fundatum opibus*: but it may mean from everlasting, as *tempore infinito* in Cicero quoted to 174; Juv. IX 16 *tempore longo*; [XI 152 *Suspirat longo non visam tempore matrem*; Virg. geor. III 565 *nec longo deinde moranti Tempore*; Ov. ars I 38 *ut longo tempore duret amor*; Mart. I 88 8 *Hic tibi perpetuo tempore vivet honor*; X 36 7 *Non venias quare tam longo tempore Romam, Haec puto causa tibi est*;] Livy XXIV 9 7 *multis enim annis tale consulum par non fuit*; Ov. heroid. XI 107 *Quid puer admisit tam paucis editus horis?*; Plaut. Amph. 91 and Men. 205 *anno* 'a year ago': and often in Caesar: *paucis diebus, quibus eo ventum erat*; *quibus in hiberna ventum est*; *quibus in conspectum adversariorum venerit*; and the like. **163** *ab imo ev.*: Aen. II 625 *et ex imo verti Neptunia Troia*: comp. Livy XLII 20 1 *columna rostrata ..tota ad imum fulmine discussa est*; Hor. epist. I 1 54 *haec Ianus summus ab imo Prodocet*; ars 254 *Primus ad extremum similis sibi*; Ov. ibis 179 *Iugeribusque novem summus qui distat ab imo*; old inscr. ap. Ritschl. ind. lect. aest. 1853 p. IV *Ecce homo non totus, medius sed piscis ab imo*: Lucr. therefore means 'tota ab imo usque ad summa evertere': Hor. sat. II 3 308 *ab imo Ad summum totus moduli bipedalis*, gives the full expression. **165** for rhythm see n. to II 1059. **168** *post ante*: Catull. 4 10 *post phaselus antea fuit*; inscr. Lat. I 1009 17 *Et antecessi genita post.* *quietos*: VI 73 *placida cum pace quietos*; Aen. IV 379 *ea cura quietos Sollicitat*: Velleius in Cic. de nat. deor. I 21 *ab utroque autem sciscitor cur mundi aedificatores repente exstiterint, innumerabilia saecla dormierint.* **174** *An, credo, in tenebris* cet.: so Velleius l. l. 22 *si ut deus ipse melius habitaret; antea videlicet tempore infinito in tenebris tamquam in gurgustio habitaverat.* *vita* is of course the life of the gods: Aen. II 92 *vitam in tenebris luctuque trahebam.* Lamb. seeing that 174 175 clearly referred to the gods, placed them before 176 (174) which as clearly refers to men: I now follow him, not Lach., as the *Nam* of 170 has immediate reference to the two prec. vss. Lach. reads *At* for *An* and wonders that so good a scholar as Lamb. should have tolerated *an, credo* in Lucr., when in Serv. Sulpicius' letter ap. Cic. ad fam. IV 5 3 he read *at, credo* for *an, c.* But his wonder would have ceased had he referred to Lambinus' omissa ex annot. p. 505 a: 'immo a Manutio dissentio et codices antiquos sequor omnesque vulgatos, qui habent *an illius vicem, credo, doles*? est enim ironia, atque ita saepe loquebantur veteres. Lucr. l. 5 *An, credo* cet.' Perhaps Lamb. is right in holding that the one passage supports the other; but I cannot help thinking with Lach. that *an credo* is a solecism. Yet in both passages *an* seems eminently in place, taking up and qualifying preceding questions; and in Sulpicius' mouth irony would have ill suited the occasion, the death of Tullia. Sulpicius perhaps wrote 'an illius vicem, Cicero, doles', the *do* of *doles* getting attached to an abbreviation of Cicero. For *credo* in Lucr. I suggest *crepera*: if CREPERA became CREPA or CREṘA, it would pass into *credo* as readily as in V 782 *crerint* has been supplanted in mss. by *credunt*: *crepera* well suits the metaphor of the next v. and we find in V 1296 *creperi certamina belli*: the phrase *in re crepera* is common in the old writers; and Varro in his Mysteria has 'prisca horrida Silent oracla crepera in nemoribus'. Comp. too Lucil. in Nonius p. 13 'Sannunt (*mss.*, Nam tu *Lach.*, Set nunc *Muell.*: ? Sin nunc) solu' mihi in magno maerore Tristitia in summa, crepera re, inventu saluti's': for in our passage, and VI 1183 *Perturbata animi mens in maerore metuque*, and III 903 *Dissoluant animi magno se angore metuque*, Lucr. may have had in mind Lucilius, whose first v. may well be completed by *iacenti* or else *metuque.* **177** see n. to III 843. **178** *blanda voluptas*: so II 966, IV 1263. **179** comp. Cic. Tusc. I 93 *nondum gustaverat, inquit, vitae suavitatem.* **180** *in numero*, vitae i.e. viventium. **182** by *ipsa Notities hominum* Lucr. clearly means to express Epicurus' πρόληψις: thus Velleius l. l. 43 in proving the existence of gods from this πρόληψις of gods in the minds of all nations says *solus enim vidit* (Epicurus) *primum esse deos quod in omnium animis eorum notionem impressisset ipsa natura. quae est enim gens aut quod genus hominum quod non habeat sine doctrina anticipationem quandam deorum? quam appellat πρόληψιν Epicurus, id est anteceptam animo rei quandam informationem, sine qua nec intellegi quicquam nec quaeri nec disputari potest*, and 44 *hanc nos habere sive anticipationem, ut ante dixi, sive praenotionem deorum, (sunt enim rebus novis nova ponenda nomina, ut Epicurus ipse πρόληψιν appellavit, quam antea nemo eo verbo nominarat): hanc igitur habemus* cet. There is a better definition in Diog. X 33: 'preconception (πρόληψιν) they define to be a comprehension so to speak or a right opinion or thought or general notion laid up, that is to say a recollection of what has repeatedly appeared from without': and comp. what follows, ἅμα γὰρ τῷ ῥηθῆναι 'ἄνθρωπος' εὐθὺς κατὰ πρόληψιν καὶ ὁ τύπος αὐτοῦ νοεῖται προηγουμένων τῶν αἰσθήσεων. What *exemplum* then had the gods, Lucr. asks, by which they first got this πρόληψις ἀνθρώπων? like a poet, he chooses a simple word in common use, *notities*; just as above and in III he terms the *intermundia* only *sedes*, defining them by various additions. **183** *Quid* cet.: 1049 *Quid vellet facere ut sciret animoque videret.* **186** *ipsa dedit* cet.: 1361 *At specimen sationis.. Ipsa dedit rerum primum natura creatrix.* **187—191** are repeated from 422—426, 192—194 from I 1026 1027, with some changes: another proof of the unfinished state in which these added sections were left; for besides that they are mere repetitions, these last nine vss. are clearly far less to the purpose here than they are in their original places, where they follow as a natural consequence from what

has preceded: here they are mere assertion, not connected in argument with what goes before: even in their other positions they are much copied one from the other. 192 *in talis disp. Dec. quoque*: *quoque* clearly belongs in strictness to *talis*, as that is the word which it brings out in contrast with what precedes: comp. II 581 *Illud in his obsignatum quoque rebus habere Convenit* i.e. Illud quoque cet.; 216 *Illud in his quoque te rebus cognoscere*; 281; III 638; V 344; VI 317; 474; 481; 577; 905. 193 *meatus* i.e. paths in which their motions go on: it is almost the same then as his more usual *motus*.

195—234: nay, if I did not know the first-beginnings of things, the imperfection of this world would prove to me the gods did not make it for man's use: see after all how small a part of the whole earth he can bring under tillage, and that with the sweat of his brow; and then his labour is often thrown away: look at all the miseries he suffers, dangers by sea and land, diseases, untimely death; compare the helpless baby with the young of other animals. 195—199 are the same as II 177—181 with very slight changes; see notes there: at II 167 it is said that the stoics are here chiefly aimed at with their teleology; see too Cicero quoted at V 156 *Dicere porro hominum causa* cet. of which this is a refutation. 195 *si iam*: see n. to I 968; and comp. Celsus prooem. p. 6 33 Daremb. *quod si iam incidat mali genus aliquod ignotum.* 198 *nobis* i.e. for our especial service, as 156 *hominum causa*: he goes on to shew how much worse in many respects the condition of man is than that of brute beasts. 200 *impetus*: see n. to IV 416 where it is said that *impetus* seems to denote here only size; though Lucr. is ready to allow the revolution of the heavens; 1436 *mundi magnum versatile templum*: yet Cic. de nat. II 97 says *cum autem impetum caeli cum admirabili celeritate moveri vertique videmus*; and Ov. met. II 79 *adsidua rapitur vertigine caelum...nec me, qui cetera, vincit Impetus, et rapido contrarius evehor orbi.* 201 *silv. fer.*: see n. to 369. 202 the rhythm of this v. was compared above with Virg. geor. II 144 *Implevere: tenent oleae armentaque laeta*; comp. too VI 1140 *Vastavitque vias, exhausit civibus urbem* with geor. III 481 *Corrupitque lacus, infecit pabula tabo*, where all that precedes and follows shews constant imitation of what precedes and follows in Lucr. 204 *duas partis*, τὰ δύο μέρη. 205 *geli casus*: as a poet he makes frost like dew come down from the sky. *geli*: VI 156 *geli fragor*; 530 *vis magna geli*; and 877 even the acc. *gelum*, *quod*: genitives in *i* of words usually of the fourth decl. are common in the old writers, *senati ornati soniti exerciti* and the like: see Neue I p. 362—364. 207 *sent. obd.*: Virg. geor. II 411 *densis obducunt sentibus.* *ni vis hum.*: ib. I 198 *ni vis humana quotannis* cet.: 208 209: ib. 45 *Depresso incipiat iam tum mihi taurus aratro Ingemere*, II 237 *validis terram proscinde iuvencis*: comp. too *duros iactare bidentis Aut presso exercere solum sub vomere*; and Tib. II 3 6 *Versarem valido pingue bidente solum*: the *bidens* being a heavy two-pronged hoe. 210 211 = I 211 212, except *Si non* for *Quae nos*: the subject therefore of *nequeant*, or an object to *cimus* must be taken somewhat harshly out of the following clause, *quaesita, omnia.* 212 *Sponte* cet.: Virg. geor. II 47 *Sponte sua quae se tollunt in luminis oras*, which at the same time imitates 781 *quid primum in luminis oras Tollere.* *nequeant*: see n. to II 922. 213 *mag. quaes. lab.*: ib. I 197 *multo spectata labore*: Macrob. compares with 213—217 Virg. geor. I 118 *Nec tamen, haec* cet. where the turn of phrase is like. 218 *genus horriferum* cet.: Cic. acad. pr. II 120 *cur deus, omnia nostra causa cum faceret, sic enim vultis, tantam vim natricum viperarumque fecerit? cur tam multa pestifera terra marique disperserit?* 221 [*quare*: Madv. gramm. 492 b. anmerk. 2 'eine directe Frage...wird durch *cur* bezeichnet; *quare* wird nur in abhängigen Sätzen gebraucht': but see Naegler 'de partic. usu ap. L. An. Senecam' Jahresbericht I p. 200, where he shows that *quare* is often used by Seneca as here.] *vagatur*: comp. Rabirius (?) fragm. in volum. Hercul. II col. 5 *Omne vagabatur leti genus, omne timoris.* Would not the very next lines tend to shew that untimely death was rather a blessing? his inconsistency indeed is well rebuked by his master in Diog. X 126 πολὺ δὲ χεῖρον καὶ ὁ λέγων, κάλλιστον μὲν μὴ φῦναι, φύντα δ' ὅπως ὤκιστα πύλας ἀίδαο περῆσαι· εἰ μὲν γὰρ πεποιθὼς τοῦτο φησί, πῶς οὐκ ἀπέρχεται ἐκ τοῦ ζῆν; 222 *proiectus*: the regular term for a castaway. 223 *indigus* seems elsewhere to govern the gen. but the verb sometimes takes the abl. in the best writers. 225 *Nixibus*: Virg. geor. IV 199 *aut fetus nixibus edunt*: Wak. compares Serenus Samon. 1038 *Nudum hominem primum mater natura profudit.* 226 *Vagituque* cet.: St. Austin changes to bitter earnest the bitter irony of the epicurean's *ut aecumst*: he says, enarrat. in psalm. 125 10, *poterat ridere prius puer qui nascitur: quare a fletu incipit vivere? ridere nondum novit, quare plorare iam novit? quia coepit ire in istam vitam*; Lear IV. 6 carries the 'pathetic fallacy' a step farther and makes the baby cry, not for his own misery, but his neighbours' folly: *Thou know'st, the first time that we smell the air, We wawl and cry...When we are born, we cry that we are come To this great stage of fools*; [comp. G. Herbert's Jacula Prudentium: *I wept when I was born, and every day shews why*;] Pliny VII at beg. takes, as is his wont, the same dismal view: thus 2 *hominem tantum nudum et in nuda humo natali die abicit ad vagitus statim et ploratum, nullumque tot animalium aliud ad lacrimas et has protinus vitae principio*, and so on; St Bernard de pass. dom. is like Lucr.: *primam vocem plorationis edimus, merito quidem utpote vallem plorationis ingressi*: Apuleius and Lactantius both copy Lucretius' words. Marullus in marg. cod. Victor. writes λαμπρόν: in some vss. quoted in vol. I p. 7 he at once imitates and refutes Lucr. 227 *restet transire*:

see n. to I 1005 *restet minus ire.* **228** *At variae* cet. so that instead of things being made *hominum causa* above all, they are less favoured than other creatures, to whom nature is far more bountiful. **233** *Qui*=quibus: IV 615 *qui sentimus sucum, lingua atque palatum*; Plaut. capt. 1003 *aut coturnices dantur quicum lusitent*; aulul. 498 *vehicla qui vehar*; [Amph. 257, and Ussing there;] Ter. Andr. 511 *multa concurrunt simul, Qui coniecturam hanc nunc facio*; Apul. met. VI 7 *indicia qui possit agnosci*: I 700 *qui*=quo. **234** *daedala rerum*: see n. to I 7 *daedala tellus*, and for constr. IV 551 *verborum daedala.*

235—246: first then, since earth water air fire are all mortal, the world of which these are the parts should be deemed mortal: the world then had a beginning and will have an end. **235** *Principio*, as was said above, has no connexion whatever with what immediately precedes, but joins on to 109, 110—234 being a subsequent addition of the poet's, as explained in n. to 110 foll. *terrai corpus*, a favourite periphrasis, as *corpus aquae, aquai, Neptuni* and the like. **236** *animae*: see n. to I 715: the adject. *animalis* has the same sense in Cic. de nat. III 34. *cal. vap.*: see n. to II 844. **239** *eodem* i.e. corpore constare *putari.* **244** *regigni*, and **269** *remanat* in this sense at least, seem not to be found elsewhere. **245** *quoque item*: see n. to III 208 *quoque etiam.* **246** *Principiale* too is a Lucretian word: II 423 *principiali levore* is smoothness of first-beginnings.

247—260: think not I am begging the question in asserting that earth water air and fire are mortal: first as to earth: some of it you see passes away in clouds of dust; some is carried away by floods or rivers eating their banks: again what feeds other things, is usually replenished in return; and since earth, mother of all things, is also their tomb, the earth wastes and grows again.—In this and the next three paragraphs he shews in turn that earth water air and fire all decay. **247** *corripuisse mihi*: Lach. cites Varro de ling. Lat. VII 94 *clepere, id est corripere*: συναρπάζειν τὸ ζητούμενον is a very common phrase in Sextus; pyrrh. hyp. I 90 he says πρὶν ἄρξασθαι τῆς κρίσεως τὰ φαινόμενα συναρπάζουσιν, ἑαυτοῖς τὴν κρίσιν ἐπιτρέποντες: *arripere* is used by Cicero in a like sense. **249** *neque dubit.* with an infin. in the sense of 'to doubt' is rare in the older writers: Nepos however opens his work with *non dubito fore plerosque, Attice*; and in him it is common; it occurs too in young Cicero's letter to Tiro: I find frequent instances in Tacitus and the younger Pliny: the elder in his praef. 18 writes *nec dubitamus multa esse*: [and Livy XXII 55 2 has *neque enim dubitabant...hostem...venturum*: see Fabri there.] **250** *rursus* belongs also to *gigni.* **251** *Principio*, to begin with earth. *perusta Sol. ads.*: Wak. compares Ovid her. V 110 *adsiduis solibus usta* and Hor. epod. 2 41 *perusta solibus.* **253** comp. Virg. geor. II 217 *Quae tenuem exhalat nebulam fumosque volucris*: Lucr. again 463 *Exhalantque lacus nebulam* cet. **255** *ad. dil. rev.*: VI 292 *Atque ita praecipitans ad diluviem revocari*: Cicero thus uses *rem revocare ad* and the like, for *adducere*, where the *re* has no force; as pro Cluent. 136 *cum rem paene ad manus revocasset*: comp. the use of *redeo* in n. to 1141 *res redibat.* **258** *Redditur* both Wak. and Lach. explain by 'restituitur, retribuitur, recreatur', and the word can have here no other meaning; though I can bring no parallel instance: 322 *quodcumque aliis ex se res auget alitque, Deminui debet, recreari, cum recipit res*; and *redditur* therefore seems=reficitur, *do* again having the force of *facio.* **259** *Omniparens* cet.: Varro de ling. Lat. V 64 *haec enim* Terris genteis omnis peperit et resumit denuo...*ut ait Ennius*; Orell. inscr. 4417 *mater genuit, mater recepit*; Romeo and Juliet II 3 *The earth that's nature's mother is her tomb: What is her burying grave, that is her womb*: Ἐκ γαίης γὰρ πάντα καὶ εἰς γῆν πάντα τελευτᾷ is assigned to Xenophanes by Stobaeus and others; Eurip. Antiop. fr. 195 Nauck ἅπαντα τίκτει χθὼν πάλιν τε λαμβάνει. *com. sep.*: Catull. 68 89 *Troia, nefas, commune sepulcrum Asiae Europaeque.* **260** and **294** *tibi*: see n. to I 797.

261—272: the same is true of water: fresh supplies are constantly coming to seas and rivers; but the sum remains the same, because as much is taken away by the winds and the sun, and by filtering through the ground, whence the water finds its way back to the river-heads. **263** *Nil opus est verbis* i.e. declarare, understood from *declarat.* *mag. dec. aqu.*: 946 *montibus e magnis decursus aquai*; I 283 *magnus decursus aquai*; VI 609 *tantus decursus aquarum.* **264, 284** and **304** *quicquid*=quicque: see n. to II 957. *primum quicquid*: see n. to I 389 *primum quemque.* **266** *verrentes—sol* recurs 388 389: VI 623 *venti... verrentes aequora.* **267** *Diminuunt* should probably be *Dem.*: see n. to 323. **269—272** recur with slight difference VI 635—638. **269** foll. see II 474—477, and Sen. nat. quaest. III 5. **271** *agmine* is thus used by Ennius before and Virgil after him; Enn. ann. 177 *Quod per amoenam urbem leni fluit agmine flumen*; so par. lost VII 305 *where rivers now Stream and perpetual draw their humid train*, and what precedes illustrates Lucr. **272** *pede* cet.: Hor. epod. 16 48 *Levis crepante lympha desilit pede*; culex 17 *Castaliaeque sonans liquido pede labitur unda*; Silius VI 140 *lento pede sulcat harenas Bagrada.*

273—280: the air too is ever changing; for whatever streams off from things, must pass into air; and thus unless the air gave back as much, all things would become air. **276** *Aeris...mare*: Wak. quotes Ennius trag. 6 *omnem pervolat caeli fretum*: [and so Shakesp. Timon IV 2 21 *we must all part Into this sea of air.*] *qui nisi retribuat recreetque, Omnia iam resoluta forent* is the sole instance in Lucr. of such a constr.: Virg. geor. IV 116 *ni...traham et ..festinem,...canerem*; Tib. I 4 63 *ni sint, . . non nituisset*; 8 22 *faceret, si non aera repulsa sonent*; Catull. 6 2 *Ni sint.. Velles dicere nec tacere posses*; Sen. Herc. Oet. 1385 *Non, si.. ruat..flagret,.. domaret*; Mart. V 20 1 *Si.. liceat.., nosse-*

mus..essent; [Plaut. aulul. 515 *Compellarem* (so mss.) *ego illum, ni metuam ne desinat*; miles 1348 *Et si ita sententia esset, tibi servire malim*: see Autenrieth die conj. *quom* p. 298, whence it appears that the present is common in old Latin where the imperfect is usual in later.] **280** *Reccidere*: see n. to I 228.

281—305: and so it is with fire too; the sun continually sends out new light, as you may see when clouds intercept it; the light beneath the clouds at once disappears; and thus it is with lights on earth; lamps and the like are constantly sending forth fresh lights, so that the destruction of the old is concealed by the instantaneous production of the new: the same is the case with sun moon and stars. **281** *fons lum.*: 293 *lucis caput ipsum*; par. lost VII 364 *Hither as to their fountain other stars Repairing in their golden urns draw light.* **282** *Inrigat*: IV 203 of the sunlight *caelumque rigare*, V 594 *caelumque rigando Compleat*; Emped. 127 καὶ ἀργέτι δεύεται αὐγῇ; Pindar ol. VI 55 boldly but beautifully Ἴων ξανθαῖσι καὶ παμπορφύροις ἀκτῖσι βεβρεγμένος ἁβρὸν Σῶμα. **291** *primum iac. ful. quemque*: see n. to I 389. **294** *terrestria*: II 386 *ignis Noster hic e lignis ortus taedaque creatus* is opposed to the *caelestem fulminis ignem.* **295** *pend. lychini*, metal lamps suspended from the ceiling: Macrob. sat. VI 4 17 compares with Lucr. Aen. I 726 *dependent lychni laquearibus aureis*, as well as Ennius and Lucilius. **298** *instant*, *Instant*: see n. to II 955 *vincere saepe*, *Vincere*; and comp. Cic. Arat. prog. quoted de div. I 14 *Et matutinis acredula vocibus instat, Vocibus instat et adsiduas iacit ore querellas*, which Lucr. seems to have had in his mind. **300** the constr. as so often in Lucr. is somewhat involved: exitium adeo properanter celatur ei luci celeri flammae origine ab omnibus ignibus: *om. ig.* because however many the *lychni* or *taedae* are, they all alike incessantly ray out brightness, so that the whole light remains uninterrupted: Bruno (Harburg 1872) well illustrates the dat. *ei* by I 898; 252; II 442. **303** *subortu* seems not to occur elsewhere, at least in this sense: the verb *suboriri* he thrice uses with the same force, that of rising up to supply what is wanting.

306—317: again the hardest things, stones metals and the like are broken up by time: they had a beginning then; else they would not give way after enduring from everlasting. **308** *fessa fatisci* occurred III 458. **309** *protollere* to advance and so defer: Plautus uses it both in its literal sense *protollere manum*, and in its metaphorical *protollo mortem mihi*; Lucr. blends the two. **313** Polle, Jahn's Jahrb. vol. 93 p. 756, argues with justice that no correction ought to neglect the proper force of *proporro*: this word, peculiar to Lucr., is found also in II 979, III 275 281, IV 890, and probably in II 137: it always means 'then further in turn' or the like: our passage then seems to contain one of those sarcasms so common in Lucr. as II 979 where the *primordia* are supposed to enquire about their own *primordia*, and I 919 where they are supposed to laugh and cry. My correction then seems simple enough, as *sēnĕ* would almost infallibly fall out before *senescere*: *cumque* is then a senseless interpolation to fill up the verse: so in Hor. od. I 32 15 *cumque* is a mere insertion, the genuine word *amica* or *fausta* having fallen out. I cannot accept Lachmann's much praised *medicumque*; for *mihi* is called for by the whole tenor of the context, and *rite vocanti* requires such a word as *fausta* or *amica*: possibly too in Lucr. II 114 *cumque* is an interpolation. [I see that Autenrieth die conj. *quom* p. 285 c defends *cumque* in Horace, but I doubt it: see too what he says of Lucretius.] The poet, observing what he would deem the many foolish inscriptions on these *monimenta*, as in inscr. Lat. I 1220 *Tu qui secura spatiarus* (sic) *mente viator,...Si quaeris quae sim* cet., sarcastically represents them as now asking sympathy for themselves: comp. Auson. epigr. 35 9 *Miremur periisse homines? monimenta fatiscunt: Mors etiam saxis nominibusque venit*; Juv. X 146 *Quandoquidem data sunt ipsis quoque fata sepulcris*; Mart. X 2 9—12. **314** *perferre patique*: see n. to II 291 *ferre patique.* **316** *pertolerassent* seems not to be found elsewhere. **317** *fragore*: see n. to I 747 *fragori*: the metaphor is from battering the walls of a fortress.

318—323: if as some say the all-environing ether begets all things and takes them back at death, then must it be mortal; for it is thus subject to increase and decrease.—This passage is an argumentum ad hominem: the notion pleases his poetical fancy, and he has already more than once seized on the thought and given to it an epicurean turn; see what has been said at I 250, and especially II 991 foll. which has much resemblance to this, *caelesti sumus omnes semine oriundi*, and 1000 *quod missumst ex aetheris oris* cet.: the consciousness of this prevents him from giving a denial to the theory here; and he contents himself with leaving it as hypothetical: *si procreat* cet. in which there is doubtless irony mixed. The passage is a paraphrase of Pacuvius 86 *Hoc vide, circum supraque quod complexu continet Terram...Id quod nostri caelum memorant, Grai perhibent aethera: Quidquid est hoc, omnia animat format alit auget creat Sepelit recipitque in sese omnia, omniumque idem est pater, Indidemque eadem aeque oriuntur de integro atque eodem occidunt.* **320** *quidam* therefore are Pacuvius and whoever they are whom he follows, be they stoics or scholars of Plato or Pythagoras or Anaxagoras or whoever else chooses to allegorise in a like spirit. Pacuvius himself was probably thinking of Zeno: he says 93 *Mater est terra: ea parit corpus, animam aether adiugat.* **323** *Deminui, recreari*, and thereby to be mortal: III 517 *At neque transferri sibi partis nec tribui vult Inmortale quod est quicquam neque defluere hilum; Nam* cet.: A has *deminui*, B *diminui*: 266 both have *diminuunt*; 389 both *deminuunt*; I 613 both *deminui*: so that probably in all places Lucr. wrote *dem.*: see Wagner aulul. 163; for I believe him to be right in

saying that *diminuo* or *dimminuo* is quite distinct from *deminuo*, the former being used in phrases like *dim. caput, cerebrum*: he well compares *describere* and *discr.*, *despicere* and *disp.*

324—350: if the world had no beginning, why did history commence with the wars of Thebes and Troy? nay the world began but lately; and so arts and sciences are still in progress: if it be said all these existed before, but were destroyed by some great catastrophe, then you must the more admit that the world will come to an end: when it suffered so grievously, had the causes been more powerful, it must have perished altogether; thus we all know we shall die, because we have the same diseases as those who are already dead. **326** *fun. Tro.*: Hor. od. I 8 14 *sub lacrimosa Troiae Funera.* **330** *summa*: as he is speaking of our *mundus*, *summa* is here *haec summa* or *haec rerum summa*: see n. to I 1008. **331** *exordia cepit*: I 149 *Principium cuius hinc nobis exordia sumet*; where see note: Virg. geor. IV 316 *Unde nova ingressus hominum experientia cepit?* **334** *organici* cet.: II 412 *musaea mele, per chordas organici quae...figurant.* **336** *cum primis* merely strengthens *primus*, first of all, before all others: VI 225 *subtilem cum primis ignibus ignem*: from Cic. Tusc. IV 6 it would appear that before him Amafinius had written popular epicurean treatises in prose. **340** *vexamine* seems not to occur elsewhere: see n. to I 434. **342** *cooperuisse*: VI 491 the mss. have more correctly *Coperiant*; VI 1068 *colescere*: comp. I 977 *probeat*, and n. there. **343** *Tanto quique magis*: see n. to III 700: the argument for the final destruction of the world is stronger than the one for its having had a beginning; because if it be liable to such terrible diseases, one of these must some day be mortal according to all analogy. **346** *incubuisset*: so VI 1143 of the plague *Incubuit tandem populo* cet.; Hor. od. I 3 30 *macies et nova febrium Terris incubuit cohors.* **349** *Inter nos*, one with the other, taken all in all.—Macrobius' comm. in somn. Scip. II 10 is worth comparing with the above paragraph.

351—379: again that which is everlasting must either be impenetrable like atoms, or intangible like void, or must have nothing without it into which it can pass or out of which destructive forces can come; and this is the case with the universe: but we have shewn that not one of these conditions is true of our world; it is therefore doomed to destruction; and therefore it had a beginning too; for being mortal, it could not have lasted from eternity. **351** *necessust*: see n. to II 710: VI 815 he has *necessis*, gen. of *necesse.* **352** and **364** *solido cum corpore*: see n. to I 755. *respuere ictus*: II 448 *ictus contemnere*: Pliny XXXVII 57 of diamonds, *respuentes ictus.* **359** *fit copia*: 371 *Deficit* is the opposite to this: Lach. compares VI 829 *magna mali fit copia circum*; and Enn. ann. 437 *Nec respirandi fit copia.* **361** *sum. summa* cet.: II 303 *Nec rerum summam commutare ulla potest vis. Nam neque, quo possit genus ullum materiai Effugere ex omni, quicquam est extra, neque in omne Unde coorta queat nova vis inrumpere et omnem Naturam rerum mutare et vertere motus*; and see n. to I 1008 *rerum summam*; for *summarum summa* is here the same; and the sum of sums is opposed to 368 *hanc rerum summam* or this *mundus* of ours; and is the same as *summam summai totius omnem* and like expressions: the phrase occurs with a different sense in Plautus, Seneca and Pliny. **362** *Qui* = aliqui: you would expect *ullus* (or *quisquam*), just as in 359 *nulla loci fit copia*: and in the passage cited to the prec. v. we have *neque quicquam*; and I 1077 *Nec quisquam locus est* cet.: *aliquis* is sometimes used in the same way: Cic. de orat. I 14 *qui neque exercitationis ullam viam neque aliquod praeceptum artis esse arbitrarentur*; pro Sest. 32; and Caes. bell. civ. III 73 3 *sine aliquo vulnere* = precisely *sine ullo vulnere* of II 9 8: but *qui* here hardly differs from Cic. ad Att. V 11 5 *nec mehercule habeo quod adhuc quem accusem meorum*; for Cic. is speaking quite generally. [We have exactly the same use of *qui* in bell. Alex. 9 1 *neve quam partem nocturni temporis intermittant*; Caes. b. Gall. IV 13 4 *ne quem diem pugnae praetermitteret, opportunissima res accidit*; V 57 1 *ne quam occasionem rei bene gerendae dimitteret.*] **364** *docui*, I 329 foll. **368** *Corruere*: the active is rare in this sense; Catull. 68 51 *mihi quam dederit duplex Amathusia curam Scitis et in quo me corruerit genere*; Apul. met. VIII 8 *Charite.. corruit corpus.* **369** *cladem pericli* is a rare form of expression: comp. 201 *silvaeque ferarum*: 1193 *murmura magna minarum*: *pericli* here and *minarum* there seem to have the force of an epithet; to be in fact genitives of quality, something like 764 *coni umbras*; III 42 *Tartara leti*: see n. there: [Virg. ecl. 4 24 *fallax herba veneni*;] Juv. III 4 *gratum litus amoeni Secessus*; V 47 *calicem nasorum quattuor*; comp. too Catull. 23 11 *Non casus alios periculorum*; and with whole verse VI 657 *Aut alium quemvis morbi per membra dolorem.* **373** *leti* cet.: Ov. met. I 662 *praeclusaque ianua leti.* **375** *patet immani* i.e. hiatu *et respectat vasto hiatu*: Aen. VI 237 *vastoque immanis hiatu.* **379** recurs 1217.

380—415: again since its chief members contend in such furious civil strife, the world may perish either when fire has overcome water, or water fire: thus, as poets fable, fire once was near conquering when Phaeton was run away with by the horses of the sun: this story may represent some real event; as may the flood of Deucalion some temporary victory of water. **381** *pio neq.* i.e. civil war: Aen. VI 612 *quique arma secuti Impia*: Livy I 32 12, in an old formula, *puro pioque duello quaerendas censeo*: such civil war cannot be. **383** *vel cum* cet. should be answered by another *vel*: but the poet gives a different turn to the expression at 386 and never completes the construction: the best Latin and Greek writers have like instances: Cic. ad Att. I 16 11 *nam et illud nobis non obest* cet.: he then, after a long parenthesis, changes the constr.;

de orat. II 48; de imp. Cn. Pomp. 17: Sen. Herc. Fur. 1285 *Aut omne* cet. with nothing to answer *aut*: comp. III 425 *Principio quoniam*, 434 *Nunc igitur quoniam*, and note there: equally slight changes of constr. are VI 105 *Nam cadere aut* cet.; 302 *Dum venit, amittens...Atque ...portat*: in these two places Lach. unskilfully changes the reading. Cicero has a hundred such, many of them harsher than any in Lucr.: de fin. II 115 *sed lustremus animo non has maximas artes...sed quaero* cet. **386** *Tantum* is the accus. after *suppeditant*. **387** *diluviare* seems to be found only here. **388 389** occurred above 266 267 with slight difference. **392** *spirantes bellum*: Cic. ad Att. XV 11 1 *fortibus sane oculis Cassius, Martem spirare diceres*; ad Q. frat. III 4 6 *in primisque* Ἄρη *πνέων Q. Scaevola*; Petron. sat. 122 *Civiles acies iam tum spirare putares*. **392 393** obs. *certamine, cernere certant*. **393** *Magnis* cet.: Enn. ann. 544 *Olli cernebant magnis de rebus agentes*; trag. 206 *cernunt de victoria*. **394** foll. though they generally contend on equal terms, yet each has once been victorious. *superantior* seems a ἅπαξ λεγόμ.: see n. to IV 961 *divisior, distractior*. **396** *superāt* is the perf.; see n. to I 70 *Inritat animi* and III 1042 *obit*. **397** *Aria*: Ovid met. II 167 *ruunt tritumque relinquunt Quadriiugi spatium*, 205 *rapiuntque per aria currum*. **399** *At pater omnipotens* both in Aen. VI 592 and Ovid met. II 304 begins the description of Jupiter striking a man with lightning; in Ovid it is, as here, Phaethon; Aen. VII 770 and Ov. met. I 154 *Tum pater omnipotens* in like manner introduces the account of his striking down something with his thunder. **400** *Mag. Ph.*: Ov. met. II 111 *magnanimus Phaethon*. *repenti*: there seems to be no other example of this adj. except in the form *repens*. **402** *aeternam*: he is here speaking as a poet; *ut veteres Graium cecinere poetae*. [*succepit*: for difference between *susc.* and *succ.* see Nettleship, Journal of philol. vol. V p. 80.] *lampada*: 610 *rosea sol lampade*; VI 1198 *nona lampade* i.e. die: used in the same way by Virgil and others. **403** comp. Ov. l. l. 398 *Colligit amentes et adhuc terrore paventes Phoebus equos*: *Colligit* expresses *redegit*. **404** *suum*: not referring to the subject of the sentence: a usage common in the best writers, Cicero Livy Sallust etc.: Ovid seems sometimes very licentious on this point; as fasti II 678 *Clamato tuus est hic ager, ille suus*, i.e. Iovis; or IV 459 *Ut vitulo mugit sua mater ab ubere rapto*, *sua* referring to the abl. abs. **405** *ut veteres* cet.: II 600 *veteres Graium docti cecinere poetae*; Cic. Arat. 33 *ut veteres statuere poetae*: of the passage in II, which the v. quoted introduces, Grote hist. of Greece I p. 33 n. 3 says 'the fine description given by Lucr. of the Phrygian worship is much enfeebled by his unsatisfactory allegorizing': but this moralising is the very condition of the existence of such passages as that one and the present; he would not and could not otherwise have written them; and to my mind it is extremely interesting to see his intense love of these seductive fancies

and the struggle between his instinct as a poet and his philosophical principles. **409** *revictae* = perhaps *victae*; as I 592 *primordia rerum... aliqua ratione revicta*; but the *re* may here have its proper force: comp. Hor. od. IV 4 23 *victrices catervae, Consiliis iuvenis revictae*. **410** *Aut* 'or else': 1026 *Aut genus humanum iam tum foret omne peremptum*; Ov. met. X 52; trist. I 8 45; Cic. ad Att. II 1 3 *aut ne poposcisses*; XVI 11 7; Livy XLII 42 9; Sen. de benef. II 31 2; epist. 92 16; Pliny II 179, where I think Detlefsen wrong in reading *ita ut* for *aut* of mss.: [comp. too Mart. XI 1 6 *Nec Musis vacat, aut suis vacaret*.] *exustae torr. auris*: Pacuvius 13 *Flammeo vapore torrens terrae fetum exusserit*: Lach. strangely says of this v. as rightly read in the mss. 'ita autem ignem *superare posse*, ut numquam revincatur, Epicurus negat'; when Lucr. says at the beginning of this very passage 382 *Nonne vides aliquam longi certaminis ollis Posse dari finem? vel cum sol* cet.

416—431: I will now describe how the various parts of the world were formed: as we said above, it was not by design that atoms framed it; but after many fruitless collisions, they chanced to fall into such motions as produced the world and all that is in it. **416** *ille* is emphatic, as II 362. **419—431**, except only 427, are all found elsewhere: 419—422 *Nam—modis multis* = I 1021—1024: 422—426 *multa modis—creare* = V 187—191: 428 = I 1026: 429—431 = with slight difference II 1061—1063: we meet again here what we have met already in this and former books: this passage which is the preface to one of the grandest parts of the poem is itself ill-constructed and patched up from various sources, shewing once more that the poem was left by its author in an unfinished state and that he had carefully worked up some portions, though he had not yet properly connected them with the rest of the poem. **422** foll. comp. the epicurean passage, taken perhaps from Epicurus himself, in Plut. de plac. phil. I 4 *τῶν ἀτόμων σωμάτων ἀπρονόητον καὶ τυχαίαν ἐχόντων τὴν κίνησιν συνεχῶς τε καὶ τάχιστα κινουμένων εἰς τὸ αὐτό, πολλὰ σώματα συνηθροίσθη καὶ διὰ τοῦτο ποικιλίαν ἔχοντα καὶ σχημάτων καὶ μεγεθῶν*. **423** *plagis Ponderibusque*, by the joint action of which, as so fully shewn in II, the first-beginnings are able to come into collision and union. **430** *saepe*: in II *semper*: both are equally appropriate; *saepe* = on many other occasions and also at the foundation of our world, *Terrai maris* cet.

432—448: then could be seen nothing that now is seen, sun stars earth sea or heaven, but a strange chaotic jumble of atoms unable to combine: gradually the different parts of the world began to separate. **432** foll. comp. Emped. 72 Ἔνθ' οὐδ' ἠελίοιο δεδίσκεται (?) ἀγλαὸν εἶδος Οὐδὲ μὲν οὐδ' αἴης λάσιον δέμας οὐδὲ θάλασσα. **432** *solis rota*: 564 *Nec nimio solis maior rota nec minor ardor Esse potest* shews the *rota* to be the *orbis*: many of the poets, beginning with Enn. ann. 548 *patefecit radiis rota candida caelum*, use the same phrase; see Forc.: but Vitruvius

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expression: I 1034 *vivant labentes aetheris ignes.* **480—488** are briefly expressed by Virgil ecl. VI 35 *Tum durare solum et discludere Nerea ponto Coeperit*: Plut. l. l. κἄπειτα ἐκ μὲν τῶν ὑποκαθιζόντων ἐγεννήθη ἡ γῆ, ἐκ δὲ τῶν μετεωριζομένων οὐρανὸς πῦρ ἀήρ· πολλῆς δὲ ὕλης ἔτι περιειλημμένης ἐν τῇ γῇ πυκνουμένης τε ταύτης κατὰ τὰς ἀπὸ τῶν πνευμάτων πληγὰς καὶ τὰς ἀπὸ τῶν ἀστέρων αὔρας [? αὐγὰς] προσεθλίβετο πᾶς ὁ μικρομερὴς σχηματισμὸς ταύτης καὶ τὴν ὑγρὰν φύσιν ἐγέννα. ῥευστικῶς δὲ αὕτη διακειμένη κατεφέρετο πρὸς τοὺς κοίλους τόπους καὶ δυναμένους χωρῆσαί τε καὶ στέξαι, ἢ καθ' αὑτὸ τὸ ὕδωρ ὑποστὰν ἐκοίλανε τοὺς ὑποκειμένους τόπους: I have quoted thus largely from this passage, because I believe it to be from the pen of Epicurus. **482** *fossas* poetically for all hollows. **484 485** *cog. terr. in artum*: Aetna 109 *non omnis in artum Nec stipata coit.* **485** *verberibus*: 1104 *verberibus radiorum.* *extrema ad limina* is of course the whole outer surface presented to them. **487** comp. Manil. I 163 *Quoque magis puras umor secessit in undas Et saccata* (*siccata* all mss. and editions) *magis struxerunt* (so mss. rightly: *strinxerunt* editions) *aequora terram.* *salsus sudor*: Plut. de plac. phil. III 16 Ἐμπεδοκλῆς ἱδρῶτα τῆς γῆς ἐκκαιομένης ὑπὸ τοῦ ἡλίου διὰ τὴν ἐπιπόλαιον πίλησιν [εἶναι τὴν θάλατταν], and Aristotle meteor. II 3 p. 357 25 observes that the phrase may suit poetry, but is unfit for natural science: II 465 *Sudor uti maris est* has nothing in common with the notion here: Sen. nat. quaest. III 15 7 *sudorem aquileges vocant quia guttae quaedam vel pressura loci eliduntur* cet. **488** *camposque natantis* recurs VI 405 and 1142; 267 *camposque natare*: Virg. geor. III 198 *campique natantes*; Aen. VI 724 *camposque liquentis*; Enn. ann. 584 and Manil. I 155, in the midst of a long imitation of this part of Lucr., *fluctusque natantes.* **493** *neque enim* cet.: the rocks could not yield at all; the other parts being more or less dense would sink more or less.

495—508: thus the earth sank to the bottom, and sea air and ether were left separate, ether above all, which glides on its even way and mixes with none of the lower elements. **499** *liquidis*: all were pure compared with the earth, though not relatively to ether. **500** *aliis alia* i.e. relicta sunt. *liquidissimus* cet.: Ovid met. I 67 *liquidum et gravitate carentem Aethera nec quicquam terrenae faecis habentem.* **502** *turbantibus*, **504** *turbare* are neut.: see n. to II 126. **503** *haec Omnia*, all this troubled air that we see here below. *haec*: comp. IV 132 *in hoc caelo qui dicitur aer*, VI 483 *huc veniant in caelum extrinsecus*; Cic. pro Caelio 39 *qui haec ex minimis tanta fecerunt*; Livy XXXIV 24 4 *ut ab latrocinio quoque Aetolorum satis pacata haec relinquatis*; Aen. IX 522 *consule longe, Haec ego vasta dabo*; [Sen. rhet. controv. I 6 4 *et haec non putant magna, nisi apparuerit ex parvis surrexisse*:] and with *omnia haec* comp. Livy V 44 7 *nec pati haec omnia Galliam fieri*; VI 40 17 *cum praeter capitolium atque arcem omnia haec hostium erant*; [Cic. epist. VII 20 1 *haec omnia*; Thuc. IV 60 at end τάδε πάντα.] **505** *labens* cet.:

this view he seems to prefer: so 1436 *mundi magnum versatile templum*; though in the next passage he leaves it an open question, as one beyond the reach of our experience and certain knowledge: 510 *caeli si vortitur orbis*, 517 *possit caelum omne manere In statione.* **507** *Pontos* cet.: Aristotle Pliny and others attest this, and Sen. nat. quaest. IV 2 29 *ob hoc Pontus in infernum mare adsidue fluit rapidus.. in unam partem semper pronus et torrens*: Othello III 3 *like to the Pontick sea Whose icy current and compulsive course Neer feels retiring ebb, but keeps due on To the Propontick and the Hellespont.* **508** a fine example of sound and rhythm adapted to sense.

509—533: the stars may move from various causes: if the whole heaven revolves, then must we say that, while an air presses on each pole and keeps it in its place, the heaven revolves with its stars by a third air which either blows on it above in the direction in which it and its stars are going, or beneath in an opposite direction; so that the whole sphere is thus kept in motion like a waterwheel: if the heaven does not move, then may the stars move because they have in them fires of ether trying to escape and thus driving them on; or an air blowing from some quarter may impel them; or they may move of themselves whither their food invites them: it cannot be told for certain how this goes on in our world; but in the countless existing worlds every one of these causes is in operation; and one must act in this our world; but it is rash to assert that any one must be the sole cause.—This passage too as Lach. has proved stands in no proper connexion with what precedes and follows: 534 should at once follow 508; and at 774 he makes no allusion whatever to this paragraph: clearly then it is an after addition of the poet's who had observed that he had entirely omitted this question of the stars, though he had so fully discussed sun and moon: it was left then by him unconnected with the rest, and placed here by his first editor.—The passage generally interrupts the fine flow and connexion of what precedes and follows; and 510 *caeli si vortitur orbis*, without one word of explanation, is strangely harsh after 505—508 *Ipse suos ignis certo fert impete labens* cet. It may be true, as Ussing and others have argued, that the passage would be more in place between 563 and 564; it may be that the poet would have finally put it there in some shape or other; but as it now stands, it will adapt itself to no context. **510** *Principio*: see n. to 505, and comp. 1436 *mundi magnum versatile templum.* **511** *Ex utraque* cet.: in this case the sphere of heaven must revolve on its axis; this axis therefore must be supported in its position: this is done by an air pressing outside on each pole, and keeping each fixed in its place; but then to put the sphere in motion another force is wanted; this must be a third air; and it may act in two ways, it may blow at right angles to the poles either above the sphere in the direction in which the sphere has to move with its stars, or it may

blow underneath in the opposite direction, moving it thus as a stream of water passing under a wheel moves the wheel, that is to say in the direction opposite to its own course. *polum* is the axis of the sphere of heaven, and *utraque pars* is each pole, the north and the south. **514** *volvenda*: 1276 *volvenda aetas*; VI 179 *glans volvenda*: the gerund has the force of a pres. partic.; see Roby gramm. pt. II p. LXXVIII: Enn. ann. 520 *Clamor ad caelum volvendus*; Virg. *volvenda dies*; II 991 *oriundi*: comp. *secundus*, and perhaps *facundus iucundus* etc. *aeterni*: see n. to 476 *viva*; and comp. Germanicus phaen. 656 *Declivemque trahunt aeterni pondera mundi*. **516** the *haustra* or *austra* belong to the *rotae*: Nonius p. 13 '*austra* proprie dicuntur rotarum cadi ab auriendo': he then cites this passage: they are therefore scoops or basins attached to the wheel to lift up the running water: Vitruv. x 5 (10) *fiunt etiam in fluminibus rotae...circa earum frontes affiguntur pinnae quae cum percutiuntur impetu fluminis, cogunt progredientes versari rotam, et ita modiolis aquam haurientes et in summum referentes.. ipsius fluminis impulsu versatae* cet.: the *modioli* answer to the *haustra* of Lucr. and the contrivance gives a good picture of what he means: [see Bluemner, Gewerbe u. Kuenste I p. 47 n. 2.] **521** *Summania* must be genuine, though a ἅπαξ λεγ. and must have reference to Summanus or Juppiter Summanus, the god of the nightly sky, to whom as Pliny II 138 tells us the Romans assigned *nocturna fulgura*, as they gave *diurna* to Jupiter: the word is evidently connected with *mane*, *Matuta*, *matutinus*, signifying the god who precedes the *mane*: *Summania templa* then I take to be the nightly *templa* of Summanus, the nightly sky; as Plaut. speaks of *Neptunia templa*, i.e. the sea: comp. too *Vulcanius Saturnius* etc. and *Acherusia templa*. Bergk however in Jahn's Jahrb. vol. 83 p. 506 says that it is to *Summanus*, as *manes* to *manus cerus*; and = sublustria; as *manus* originally must have meant 'bright, shining', and then metaph. 'good, propitious'. **522** *aliunde fluens alicunde extrinsecus*, another instance of pleonastical language: *alicunde* is *ab aliquo loco*, the opposite of *aliquo*: so that *ali. alic.* seems to be only *ab aliquo alio loco*, and *extrinsecus* implies the same thing, the whole phrase being simply the contrary of the *inclusi aestus*, the heats shut up in the stars themselves: Plaut. trin. 758 twice uses *ab amico alicunde*; epid. III 1 10 *verum aliquid aliqua aliquo modo Alicunde ab aliqui aliqua tibi spes est*; 13 *Quippe tu mihi aliquid aliquo modo alicunde ab aliquibus blatis*. **524** *euntis* must be the nomin. **524** *euntis*, **525** *pascentis*: see n. to 692 693. **523—525** seems at first sight almost a stoical doctrine; but is merely a poetical mode of saying that the fires of the stars are drawn on by that portion of the ether which provides them the fuel or nutriment they need: three out of the four causes here assigned are given by Epicurus himself in his letter to Pythocles in Diog. x 92 τάς τε κινήσεις αὐτῶν οὐκ ἀδύνατον μὲν γίνεσθαι κατὰ τὴν τοῦ ὅλου οὐρανοῦ δίνην, ἢ τούτου μὲν στάσιν αὐτῶν δὲ

δίνην κατὰ τὴν ἀρχῆθεν ἐν τῇ τοῦ κόσμου γενέσει ἀνάγκην ἀπογεννηθεῖσαν ἐπ' ἀνατολῇ, εἶτα τῇ θερμασίᾳ κατά τινα ἐπινέμησιν τοῦ πυρὸς ἀεὶ ἐπὶ τοὺς ἑξῆς τόπους ἰόντος. **526** comp. Livy x 18 7 *piget tamen ponere certum*. **529** *sequor disponere* is an unusual constr.: it = III 420 *pergam disponere*: Ov. trist. II 263 *Persequar inferius.. Posse nocere animis carminis omne genus*; [Q. Cic. de pet. 49 *hoc sequor, haec pertinere*; Hor. od. I 23 9 *non ego te.. frangere persequor*; Plaut. asin. 159 *tractare exequar*; merc. 901 *hoc itiner perficere exequar*; ciris 254 *Persequitur.. causas exquirere*; Aen. III 31 *Rursus et alterius lentum convellere vimen Insequor et causas penitus temptare latentis*.] **532** *vegeat* = faciat ut vigeat: an archaic word. **533** *ped. progred.*: 1453 *Paulatim docuit pedetemtim progredientis*.

The last eight verses are to be noted, as bearing not only on what precedes, but also on what follows in this book about the sun and moon, and in the sixth about thunder clouds and other celestial phenomena. On comparing Epicurus' letter to Pythocles in Diog. Laert. x 84 foll. it will be found that master and pupil are in precise agreement on this as on most matters. The contempt which Epicurus had for astronomers and other system-mongers and the doctrine he held with regard to μετέωρα form one of the most curious features of his philosophy. Whatever could be brought to the test of sense and was confirmed by it was true; all opinions again which could not be brought to such test and at the same time were not contradicted by it were to be held to be equally true. Now to apply this to the present question: he says l. l. 86 it is a certain truth that the universe consists of body and void and that atoms are indivisible: so with all things ὅσα μοναχὴν ἔχει τοῖς φαινομένοις σύμφωνίαν, ὅπερ ἐπὶ τῶν μετεώρων οὐχ ὑπάρχει· ἀλλὰ ταῦτά γε πλεοναχὴν ἔχει καὶ τῆς γενέσεως αἰτίαν καὶ τῆς οὐσίας ταῖς αἰσθήσεσι σύμφωνον κατηγορίαν. οὐ γὰρ κατ' ἀξιώματα κενὰ καὶ νομοθεσίας φυσιολογητέον, ἀλλ' ὡς τὰ φαινόμενα ἐκκαλεῖται, and then he goes on to give this reason, οὐ γὰρ δὴ ἰδιολογίας καὶ κενῆς δόξης ὁ βίος ἡμῶν ἔχει χρείαν, ἀλλὰ τοῦ ἀθορύβως ἡμᾶς ζῆν. His doctrines then of body and void and the nature of atoms are certain truths which admit of but one explanation because every phenomenon here on earth attests them, and by most certain induction and reason they can be extended to the whole universe, alike to what is below and what is beyond our sense. Again it is a certain truth that the sun is really about the same size as it appears to us to be: see Epic. l. l. 91, Lucr. v 564—591: because from the experiments you can make with fire here on earth and the fact that so long as it is visible it does not diminish in size, but sooner indeed loses its brightness, you can by reason and induction apply these facts to the sun and the stars. Again that our world was formed nearly in the manner just described by Lucr. is true, because earth water air and fire of which it is composed always do and must in like circumstances act in the way they are there

represented as acting. But to say that the stars and the sun must move from some one controlling cause, or that eclipses can admit of only one explanation, or that lightning and clouds can be formed in only one way is a vain unphilosophical assumption, since they are beyond our powers of observation and there are many ways of explaining them equally probable, to which οὐδὲν τῶν φαινομένων ἀντιμαρτυρεῖ, or οὐθὲν τῶν ἐναργημάτων διαφωνεῖ and the like: you must not then fear τὰς ἀνδραποδώδεις τῶν ἀστρολόγων τεχνιτείας: to give one explanation καθῆκόν ἐστι τοῖς τερατεύεσθαί τι πρὸς τοὺς πολλοὺς βουλομένοις, nay it is μάταιον, and even μανικόν. Well then all the possible reasons which Lucr. has just given of the motion of the stars are equally unrefuted by sense; are equally true therefore; and though only one of them may apply to our world, yet in the countless worlds, like and unlike ours, existing in the universe they all may and must find their place, l. l. 94 ἐὰν μή τις τὸν μοναχῇ τρόπον κατηγαπηκὼς τοὺς ἄλλους ὡς κενοὺς ἀποδοκιμάζῃ, οὐ τεθεωρηκὼς τί δυνατὸν ἀνθρώπῳ θεωρῆσαι καὶ τί ἀδύνατον, καὶ διὰ τοῦτ' ἀδύνατα θεωρεῖν ἐπιθυμῶν.

534—563: the earth remains at rest in the midst of the world, because its weight gradually diminishes and below it is another nature closely connected with the air above the earth: thus the whole forms as it were an organic whole, and one part does not weigh down another any more than one member of the body another member, the whole having been united and working together since its first formation: see too how the light soul sustains and puts in motion the whole heavy body.
534 *Terraque*: Lucr. does not tell us what the shape of the earth is; but he must have conceived it as presenting a surface more or less flat both above and below. **535** *Evanescere* cet. i.e. below on the under-surface: *evanescere et decrescere*, as 625 *Evanescere, imminui*, seems a decided ὕστερον πρότερον: for the latter must have place before the former: [comp. Caes. b. civ. III 1 3 *ad timorem novarum tabularum tollendum minuendumque.*] **538** *vivit*: see n. to 476 *viva*: yet it does appear harsh to apply this epithet to the *bruta terra*, the model of *Quid sit vitali motu sensuque remotum*: perhaps he was thinking of it as forming a sort of organic body with the air, like the human body with which he proceeds to compare it. Epic. in Diog. x 74 says merely καὶ ἡ γῆ τῷ ἀέρι ἐποχεῖται: in XI of his περὶ φύσεως, col. 1, vol. Hercul. II, he seems to be speaking to the same purpose as Lucr.; but its condition leaves it scarcely intelligible. Plut. de plac. phil. III 15 assigns this notion to Anaximenes: διὰ τὸ πλάτος ἐποχεῖσθαι τῷ ἀέρι. Pliny nat. hist. II 10 gives an account much resembling that of Lucr.: *spiritus quem Graeci nostrique eodem vocabulo aera appellant, vitalem hunc et per cuncta rerum meabilem totoque consertum; huius vi suspensam cum quarto aquarum elemento librari medio spatii tellurem* cet. A stoic might perhaps have pointed to his fierce attack on their cosmical system I 1052 *Illud in his rebus longe fuge credere* cet.: and argued that after all his mode of supporting his earth in space did not so much differ from theirs; but what he objected to in them was their making the universe finite, our one *mundus* in fact, which he argues could not be held together amid an infinite void: atoms infinite in number are always streaming up on all sides to supply our world. The stoic Manilius I 194 from the earth argues to the *mundus*, his universe: *Nec vero tibi natura admiranda videri Pendentis terrae debet, cum pendeat ipse Mundus et in nullo ponat vestigia fundo.* **545** *quid obeat* i.e. quod munus obire debeat, what its proper and regular function is. **556** foll.: comp. IV 898—906.

564—591: the sun, the moon whether it shine by its own or borrowed light, and the stars are about the same size as, it may be a very little greater or less than, they appear to us; just as fires here on earth so long as they are visible do not increase or diminish in size to any great extent. **567** *Adicere*: I 688 *rei quae corpora mittere possit Sensibus et nostros adiectu tangere tactus.* **569** *ad speciem*: see n. to III 214. **571** *mulcent*: III 141 *haec loca circum Laetitiae mulcent.* **572, 581** and **589** *filum*: see n. to II 341. **574** *pl. aut m.*: I 240 *minus aut magis indupedita*: [comp. Hirt. b. Gall. VIII 20 1 *quae non longius ab ea caede abesse plus minus octo milibus dicebantur.*] **575** *Lunaque* cet.: you can tell for certain that the moon is of the same size as it looks; but you cannot tell whether its light is its own or borrowed; whereas unphilosophical astronomers assert that its light must be borrowed, and that it is thousands of times larger than it appears: see remarks added after 533. *notho*: Catull. 34 15 *notho es Dicta lumine luna.* **578** *Quam* i.e. figura, *qua cernimus, esse videtur.* **583** *ut est* cet. i.e. necesse est videatur nobis e terra talis qualiscumque est oris notata et quantacumque est: the use of *utcumque* here closely resembles that of *ut* in I 442 *erit, ut possunt*; and II 901 *ut debent*: see n. there. **584** *Quanta quanta*: Cic. ad Att. XII 23 3 *quantiquanti* 'at whatever price': Donatus to Ter. ad. 394 '*quantus quantus*, id est quantuscumque': comp. *quisquis* = quicumque, *quoquo* = quocumque; *quamquam, utut, ubiubi, undeunde.* **585** is immediately connected with 590 *Scire licet*, 586—589 being a parenthetical illustration from earthly fires. **588** *mutare* neut. as often in prose; see Forc.: *perparvom quiddam* being a cognate neut. **589** *Alteram utram* i.e. maiorem aut minorem: see n. to III 904 for elision: *alteram utram*, as well as *alterum utrum, alterius utrius* are found in Cicero: *altera utra* nom. and abl. in Livy and others: Lucr. uses elsewhere *alterutrā* and *alterutrum.* **590** *perquam pauxillo, exigua parte brevique*, as *Perparvom quiddam*, his favourite accumulation of terms to shew the extremely small amount of increase or decrease. The above passage exactly agrees with Epic. l. l. 91 τὸ δὲ μέγεθος τοῦ ἡλίου τε καὶ τῶν λοιπῶν ἄστρων κατὰ

μὲν τὸ πρὸς ἡμᾶς τηλικοῦτόν ἐστιν ἡλίκον φαίνεται· (τοῦτο καὶ ἐν τῇ ἑνδεκάτῃ περὶ φύσεως. ‘εἰ γὰρ’ φησὶ ‘τὸ μέγεθος διὰ τὸ διάστημα ἀποβεβλήκει, πολλῷ ἂν μᾶλλον τὴν χρόαν’)· ἄλλο γὰρ τούτῳ συμμετρότερον διάστημα οὐθέν ἐστι· κατὰ δὲ τὸ κατ’ αὐτὸ ἤτοι μεῖζον τοῦ ὁρωμένου ἢ ἔλαττον μικρῷ ἢ τηλικοῦτον ἡλίκον ὁρᾶται· οὕτω γὰρ καὶ τὰ παρ’ ἡμῖν πύρα ἐξ ἀποστήματος θεωρούμενα κατὰ τὴν αἴσθησιν θεωρεῖται. καὶ πᾶν δὲ τὸ εἰς τοῦτο τὸ μέρος ἔνστημα ῥᾳδίως διαλυθήσεται, ἐάν τις τοῖς ἐναργήμασι προσέχῃ, ὅπερ ἐν τοῖς περὶ φύσεως βιβλίοις δείκνυμεν: Lucr. doubtless had before him the 11th book of the περὶ φύσεως which Diogenes quotes in the middle of this extract, and of which such imperfect fragments are published in the volum. Herculan.; the τὴν χρόαν there is the *claram speciem certamque figuram* of Lucr.: Cicero does not lose this opportunity of jeering, as in the acad. pr. II 82, and de fin. I 20 *sol Democrito magnus videtur, quippe homini erudito in geometriaque perfecto; huic pedalis fortasse; tantum enim esse censet quantus videtur, vel paulo aut maiorem aut minorem.*
591 *maioris*: the *-is* is common in comparatives: the carmen arvale has *in pleores* once, *in pleoris* twice; the best mss. of Cicero Virgil and others give occasionally the same form; Charisius I p. 137 Keil attests *maioreis* on the authority of Pliny as used by Cicero.

592—613: the great amount of heat and light proceeding from so small a sun may be explained in several ways: the sun may be the well-head to which the light and heat of the whole world flow; or the air about it may be of a nature to catch fire; or much unseen fire may exist in the neighbourhood of the visible sun. **594** *rigando*: see n. to IV 202. **598** *Largifluum* seems not to occur elsewhere; there is no authority for the word in the passage of Pacuvius quoted by Cic. de or. III 157. *lumen* is the object of *erumpere.* **604** *etiam quoque*: see n. to III 208. **605** *percipiat*: see n. to IV 729 *percipiunt oculos.* **609** *Accedere*: for form see II 1025; for accus. after it comp. Plaut. Stichus 88 *mihi paternae vocis sonitus auris accidit*: Lucilius and Accius have *accumbere mensam*: comp. too the constr. of *adeo, accedo*; Virgil's *urbem adferimur, advehitur Teucros*; and Ov. met. III 598 *adducor litora.*
610—613 Tyndall quotes what he calls ‘this remarkable passage’ before his essay on radiation, Frags. of Science p. 170; and in the course of the essay shews that the sun's invisible rays far transcend the visible in heating power; and that about 98 per cent. of the whole radiation from our fire consists of invisible rays. **613** it is not clear whether *tantum* is ‘only’ or ‘so much’.

614—649: it is by no means clear how the sun performs its annual course, and how the moon in a month goes through the same journey: Democritus may be right who says that the nearer any body is to the earth, it is carried on less swiftly by the revolution of the heaven; now the moon is nearer than the sun, the sun than the signs of the zodiac; therefore the moon seems to travel faster than the sun, the sun than the signs, because in truth they in their revolution with the heaven catch up the moon which is slowest first, and then the sun: or two airs may blow in turns in cross directions, one of which drives the sun from the summer to the winter signs, the other drives it from the latter to the former: and so with moon and stars. **616** and **640** *flexus* are the same as *metas.*
617 *solstitialis*: the best writers confine this term sometimes to the summer solstice; Cic. de nat. II 19 *solis accessus discessusque solstitiis brumisque cognosci.* **619** *Annua* cet.: Manil. III 515 *Annua quod lustrans consumit tempora mundum*: but comp. this v. and 691 *Propter signiferi posituram totius orbis, Annua sol in quo concludit tempora serpens, Obliquo terras et caelum lumine lustrans* with Cic. Arat. 318 *Orbem signiferum perhibebunt*, 332 *Haec sol aeterno convestit lumine lustrans, Annua conficiens vertenti tempora cursu:* Lucr. we have seen twice uses *aeternus* in this way with poetical inconsistency: and then comp. 644 *Quae volvunt magnos in magnis orbibus annos*, 648 *per magnos aetheris orbes*, 635 *ad signum quodque reverti*, 636 *ad hanc quia signa revisunt*, III 316 *Quorum ego nunc nequeo caecas exponere causas*, I 992 *sub caeli tegmine*, II 663 *sub tegmine caeli*, V 1436 *mundi .. templum Sol et luna suo lustrantes lumine*, 688 *nocturnas exaequat lucibus umbras*, 432 and 564 *solis rota*, 616 *Brumalis adeat flexus*, 640 *Brumalis usque ad flexus*, 612 *qui sit fulgore notatus*, 665 *conficere orbem*, IV 171 and VI 252 *caeli complesse cavernas*, with Cic. Arat. 232 *Haec faciunt magnos longinqui temporis annos, Cum redeunt ad idem caeli sub tegmine signum, Quarum ego nunc nequeo tortos evolvere cursus*, 236 *magnos edemus gentibus orbes*, 239 *caeli sub tegmine*, 237 *aeterno lustrantes lumine mundum*, 242 *Tam magnos orbes*, 337 *signa revisunt*, 288 *Exaequat spatium lucis cum tempore noctis*, 281 *rota fervida solis*, 282 *brumali tempore flexus*, 249 *fulgens candore notatur*, 250 *conficit orbem*, 252 *caeli lustrare cavernas.* It is evident Lucr. had studied this translation of Cicero; other parts of which are imitated in other parts of this poem.

621 *vel cum primis*, as if this seemed the most plausible theory, where all must be uncertain. **622** = III 371. **624** *cum caeli turbine*: 510 *magnus caeli si vortitur orbis*; which Lucr. also appears to think most probable. **625** *Evanescere, Imminui*: comp. 535 *Evanescere, et decrescere*, and n. there. **627** *cum poster. sig.*: it is overtaken and passed by one sign of the zodiac after another and thus left with the hinder ones, which pass it in turn, until the whole zodiac has gone by it in the opposite direction to that in which it has appeared to go through the zodiac. **628** *fervida signa* i. e. of the zodiac which are higher and therefore carried on in more rapid revolution. **629** *magis hoc* i.e. lunam magis quam hunc relinqui. [**630** *abest .. propinquat* is an intrusion of oratio recta in the midst of oratio obliqua; in 632 the construction passes wholly into the former. A very similar instance is Cic. de fin. III 49 *Diogenes autem censet...non idem facere eas in virtutibus neque*

in ceteris artibus, ad quas esse dux pecunia potest, continere autem non potest. ..neque ab ulla re.. contineri potest.. nulla ars divitiis contineri potest.] **631** *tendere cursum* seems to be no more than *tendere iter*, or *cursu tendere*, which Sallust and Virgil use: Aen. XII 909 *avidos extendere cursus*: Livy XXIII 34 5 has *tendere cursum* and Virg. Aen. V 834 *contendere cursum* for a ship keeping on its course. **632** *fertur* cet.: he now passes to the oratio recta, which he had partially adopted in 630 *abest, propinquat.* **636** *ad hanc revisunt*: II 359 *revisit Ad stabulum*, where see note. I do not find Democritus' name elsewhere attached to this theory: Geminus elem. astr. 10, though he condemns it, gives a lucid account of it; λέγουσί τινες, he says; and he illustrates it by this comparison: if twelve runners are going round in a circle at the same pace and a thirteenth is going the same round at a slower pace, he will appear to be running through those behind him, while in truth they are all passing him: the sun or the moon is this thirteenth; the twelve runners the signs of the zodiac which are really passing the sun and moon, while these seem to be going through them in the contrary direction. **637** *aer...alter* cet. i.e. duo aeres, alter *Qui queat aestivis* cet., alter *qui reiciat.* **641** *frigoris umbris*: Wak. quotes Virg. geor. III 357 *Tum sol pallentis haut umquam discutit umbras.* **644** *Quae volvunt* cet. refers of course only to *stellas*: Lucr. imitates Cicero quoted above. *volvunt annos* i.e. volvendo faciunt; Cicero less poetically *Haec* (Hae) *faciunt magnos longinqui temporis annos*; Aratus himself 458 Μακροὶ δὲ σφέων εἰσὶν ἑλισσομένων ἐνιαυτοί. **645** *Aeribus*: see n. to II 1097 *caelos.* **647** *supernis* dat. gov. by *diversas*: Hor. epist. I 18 5 *Est huic diversum vitio vitium*: Ovid met. IX 321 *forma est diversa priori*; Juv. X 3 *illis multum diversa*: this constr. is common in Quintilian; see Bonnell's lexicon. Our sentence is a very common kind of conciseness of expression for *in partis contrarias iis partibus in quas superna eunt*, and resembles III 1038 *eadem aliis sopitu' quietest* and the like. **649** *sidera* here, as above 623, means all the heavenly bodies, sun moon planets and fixed stars.

650—655: night comes, either because the sun is extinguished, or, if that is not so, because he passes beneath the earth in the same way as he passed above it.—In this and the following paragraphs he leaves you your choice between the hypothesis that the sun dies daily and a new one takes its place in the morning, and theories more resembling the ordinary belief of astronomers; experience being unable to decide: just so his master in Diog. X 92 ἀνατολαὶ καὶ δύσεις ἡλίου καὶ σελήνης καὶ τῶν λοιπῶν ἄστρων καὶ κατ' ἄναψιν γίνεσθαι δύνανται καὶ κατὰ σβέσιν.... καὶ καθ' ἑτέρους δὲ τρόπους, ὥστε τὰ προειρημέν' ἀποτελεῖσθαι· οὐδὲν γὰρ τῶν φαινομένων ἀντιμαρτυρεῖ κ.τ.λ. **651** *de*: see n. to VI 290. **652** *efflavit lan. ignis*: comp. 758 *Solque suos etiam dimittere languidus ignis* cet. and II 832 *prius omnem efflare colorem.* *efflare* therefore = dimittere, not its usual sense. **653** *itere*: on the other hand VI 339 *itiner*: *iteris* or *itere* appears to be used by Naevius Pacuvius Accius Varro; *itiner* by Plautus Ennius Pacuvius Accius Manilius I 88.

656—679: daylight returns at stated hours, either because the same unchanged sun passes under the earth and comes above it again, or because the fires of a new sun collect every morning at the proper time: this may well be; for many things, such as puberty in man, come at a certain time; and many things such as snow rain and lightning return pretty regularly: so it has been from the beginning and so it continues to be.—The alternative here allowed is the same as that given in the preceding passage; see Epicurus there cited: the old sun returns, or a fresh one is born every day. **659** *Anticipat* governs *caelum*: comp. Cic. ad Att. VIII 14 2 *dices, quid igitur proficis qui anticipes eius rei molestiam quam triduo sciturus sis?* **663** *Idaeis* cet.: Diodorus Sic. XVII 7 6 gives the same curious story more fully than Lucr.; as well as Mela I 94 and 95: the Trojan Ida is spoken of. The stoic Cleomedes de subl. II 87 scoffs at this theory of Epicurus: καίτοι πρὸς ἅπασι τοῖς εἰρημένοις ἀτοπωτάτοις οὖσι ἔτι καὶ τὰ ἄστρα ἀπεφήνατο ἀνατέλλοντα μὲν ἐξάπτεσθαι, δυόμενα δὲ σβέννυσθαι, and he cleverly remarks that this is like saying that men while they are seen are alive; as soon as they are out of sight are dead. **664** *orienti*: 887 *fugienti l. vita*; VI 126 *Turbine versanti*; IV 914 *Vera repulsanti*: the abl. in *i* is rare, when it is a real participle; common where the partic. is rather an epithet, as 1074 *florenti aetate*; I 282 *Flumine abundanti*; VI 1197 *Octavoque fere candenti lumine.* **670—673** *certo tempore, tem. certo, in cer. tem.*: see n. to I 93. **673** *inpubem* cet.: 888 *iuventas Occipit et molli vestit lanugine malas*: Aen. VIII 160 *Tum mihi prima genas vestibat flore iuventas.* **674** *pariter malis*: I 88 *Ex utraque pari malarum parte profusast.* [Sen. rhet. suas. 3 1 Arellius Fuscus says of the moon, *splendensque pariter adsurgit in cornua.*] **676** *Non nimis* in this sense is common enough in Cicero. **678** *Atque ita* cet. is like Epicurus' expression l. l. 92 κατὰ τὴν ἀρχῆθεν ἐν τῇ τοῦ κόσμου γενέσει ἀνάγκην ἀπογεννηθεῖσαν. **679** *Consequë*: comp. n. to I 560 *relicuo*, of which the principle is the same; and see Lachmann's very learned note: he shews that *adsecuë* is used more than once by Plautus: the old writers never contracted the last two syllables into one in any of these words, any more than in *ingenuus perpetuus ambiguus* and the like.

680—704: days and nights lengthen and shorten time about, either because the sun continuing the same chooses to run in unequal curves above and below the horizon, his course above being as much more or less than a semicircle, as his course below is less or more, until at each equinox the two are equal: all this you may see marked on a map of heaven: or else the air is denser in some parts than in others, so that he travels more slowly through the former: and thus the winter nights are

longer: or else a new sun is always born, and in successive parts of the year his fires collect more or less quickly and so rise in particular quarters.—Again three courses are open to your choice, the first most resembling the theory of vulgar philosophers. **681** *cum sumant*: see n. to III 736 *Cum subeant.* **682** *sol idem*, as 658. **683** *amfractibus*: this word is used by Cicero more than once for the annual course of the sun; see Forc.: but Lucr. here employs it for the unequal daily curves it makes above and below the horizon. **686** *relatus*: if the other part is from east to west, *relatus* expresses the return from west to east. **687** *anni Nodus* must here mean the intersection of the ecliptic and equator at the two equinoxes, though *nodus* in astronomical Latin and σύνδεσμος in Greek have also other meanings: Cic. Arat. 287 *In quo autumnali atque iterum sol lumine verno Exaequat spatium lucis cum tempore noctis.* **689** *cursu* i.e. solis. *medio* governs *flatus*; comp. Caes. bell. Gall. I 34 1 *aliquem locum medium utriusque*; Ovid met. V 409 *Est medium Cyanes et Pisaeae Arethusae...aequor*; 564 *medius fratrisque sui maestaeque sororis*; 644 *medium caeli terraeque per aera vecta est*; VI 409 *Qui locus est iuguli medius summique lacerti*; Aen. IV 184 *volat caeli medio terraeque*; Hor. epist. I 18 9 *Virtus est medium vitiorum et utrimque reductum.* Cic. in his Aratea often has *aurae aquilonis*, *austri*, and the like to denote the point from which the wind blows, as Lucr. here uses *flatus*: 280 *a clarisonis auris aquilonis ad austrum Cedens*, 272 *ab infernis austri convertitur auris*, 253 *Quorum alter tangens aquilonis vertitur auras*: Lucr. has probably taken the notion from him. When the sun is midway between the two solstices, the heaven *Distinet aeq. discr. metas*: 617 *Cancri metas solstitiales* was the tropic of cancer; and it would be natural therefore to take *metas* here for the two tropics, as editors have generally done. But the sentence is then a sheer truism, when the sun is midway between the tropics he is midway between them. Lucr. has been speaking of the inequality of day and night and accounting for it by the path of the sun, *imparibus currens amfractibus, in partis non aequas dividit orbem*, until *anni Nodus nocturnas exaequat lucibus umbras*: here too I take him to be speaking of the daily revolution of the sun, when day and night are equal. *metas* can of course be used for the points where he rises and sets; as Ovid met. III 145 *Et sol ex aequo meta distabat utraque*; II 142 *Hesperio positas in litore metas Umida nox tetigit*; ars III 724 *Inque pari spatio vesper et ortus erant*: the heaven keeps his two goals, the points where he rises and sets, at an equal distance from north and south, i.e. speaking roughly he rises and sets due east and west: 683 we had *amfractibus* for the diurnal course, which Cicero uses, as was said, for the annual. **690** *aequato discr.*: he no longer *in partis non aequas dividit orbem.* **691** *sign. orbis*: Cic. Arat. 317 *Zodiacum hunc Graeci vocitant nostrique Latini Orbem signiferum perhibebunt nomine vero*; the same name he and others give to it in prose

as well: 712 *signorum per orbem.* **692** *serpens*, **693** *lustrans*: see notes 1 for three other instances in which Lach. has corrupted his author from a vain objection to two participles in such a connexion as this: Cicero in his Aratea again and again has examples of this, and in the parts most imitated by Lucr. as 237 *Quattuor aeterno lustrantes lumine mundum, Orbes stelligeri portantes signa feruntur, Amplexi terras caeli sub tegmine fulti*; 260 *recedens, devitans*; 264 *consistens, distinguens*; 332 *lustrans, conficiens*; 379 *depellens, pandens*; progn. fr. 3 *Cana fulix fugiens, clamans, fundens*: Lach. in support of his violent and clumsy changes has these words 'nam via solis obliqua est, totus obliquus zodiacus, lumen solis nequaquam semper obliquum est'; the point of which so far as Lucr. and the latitude of Rome Berlin or Cambridge are concerned I have in vain attempted to see. **699** *noctes* cet.: Virg. geor. II 482 *vel quae tardis mora noctibus obstet*; if the meaning indeed be the same. **700** *radiatum*: 462 *radiati lumina solis.* *insigne*: Cic. de nat. I 100 *cum ipsum mundum, cum eius membra, caelum terras maria, cumque horum insignia, solem lunam stellasque vidissent*: the sun is day's chief ornament: orator 134 *similia illis quae in amplo ornatu scaenae aut fori appellantur insignia, non quod sola ornent sed quod excellant.* **701** *Aut etiam* cet.: he must provide as usual for the hypothesis that a fresh sun is born every day. *sic* refers of course to 696 *quia crassior est* cet. **703** *certa parte*: a particular quarter which varies every day throughout the year. *certa desurgere parte*: Hor. sat. II 2 76 *ut pallidus omnis Cena desurgat dubia*; I 4 31 *nequid Summa deperdat metuens*; II 2 105 *Non aliquid patriae tanto emetiris acervo*; epist. I 6 21 *dotalibus emetat agris*: Lucr. himself II 703 *egigni corpore vivo*; VI 761 *quibus efflant causis.* **704** see what is said in notes 1 to prove that a v. is here lost: unless it be so, there is nothing to indicate that he is speaking of the daily creation of a new sun, as he manifestly must be doing; comp. too the similar way in which he concludes his discussion of the moon in the next paragraph, 748—750 *Quo minus est mirum si certo tempore luna Gignitur et certo deletur tempore rusus* cet. Among those who thus 'seem to speak the truth' was Heraclitus, who held like Epicurus that it was εὖρος ποδὸς ἀνθρωπείου.

705—750: the moon may borrow its light from the sun, increasing as it recedes from him, until, when directly opposite, it shews its full face; and again diminishing as it again approaches: in this case the moon must be a round ball moving below the sun: it may shine too with its own light, and its partial or total concealment may be caused by an opaque body invisible to us getting between it and us in various ways: or thirdly it may be a ball half bright half opaque which presents to us all these various phases, as the Chaldees assert in opposition to the first hypothesis, that of the astronomers: or lastly a new moon may be born daily, each successively presenting a different phase; thus many

things, for instance the four seasons, come round in regular order.—Epic. l. l. 94 reasons in just the same way, κενώσεις τε σελήνης καὶ πάλιν συμπληρώσεις καὶ κατὰ στροφὴν τοῦ σώματος τούτου δύναιντ᾽ ἂν γίνεσθαι καὶ κατὰ σχηματισμοὺς ἀέρος ὁμοίως, ἔτι τε καὶ κατ᾽ ἐπιπροσθήσεις καὶ κατὰ πάντας τρόπους καθ᾽ οὓς καὶ τὰ παρ᾽ ἡμῖν φαινόμενα ἐκκαλεῖται εἰς τὰς τούτου τοῦ εἴδους ἀποδόσεις...ἔτι τ᾽ ἐνδέχεται τὴν σελήνην ἐξ ἑαυτῆς ἔχειν τὸ φῶς, ἐνδέχεται δὲ καὶ ἀπὸ τοῦ ἡλίου· καὶ γὰρ παρ᾽ ἡμῖν θεωρεῖται πολλὰ μὲν ἐξ ἑαυτῶν ἔχοντα πολλὰ δ᾽ ἀφ᾽ ἑτέρων...ἡ δ᾽ ἔμφασις τοῦ προσώπου ἐν αὐτῇ δύναται μὲν γίνεσθαι καὶ κατὰ παραλλαγὴν μερῶν καὶ κατ᾽ ἐπιπρόσθησιν καὶ κατὰ πάντας τρόπους ὅσοι ἂν θεωροῖντο τὸ σύμφωνον τοῖς φαινομένοις κεκτημένοι. The reasoning is quite the same as in the preceding sections: any of these theories may be true, and as none can be proved not to be true, none being opposed to sense, all are equally true; any one therefore μαχόμενος τοῖς ἐναργήμασιν οὐδέποτε δυνήσεται ἀταραξίας γνησίου μεταλαβεῖν: the attainment of this ἀταραξία γνήσιος being the end Epicurus and Lucretius had before them in writing their physics, and not the vain ambition to propagate idle mathematical and other theories. **707** and **724** *Ad speciem*=ad visum: see n. to IV 236. **708** *pleno bene*: this use of *bene* is a favourite one with Cicero. **712** *signorum per orbem*: see n. to 691 *signiferi orbis*. Lucr. here gives a lucid statement of the true cause. **714** *cursus viam*: 1124 *iter viai* and II 626 *iter omne viarum* seem not unlike: Vitruvius IX 2 1 (4 17) *cursum itineris sui peragens*. **715** *Est quare possit*=est ut possit, so common in Lucr.: see n. to I 620 *Nil erit ut distet*: it means therefore simply *potest*; and is not used as 730 *sit cur*, where *cur* has its usual meaning; it has in fact much the same force as *qua re* in II 960, and should perhaps be written as two words; see also n. to VI 132. Plut. de plac. phil. II 28 mentions Anaximander and Antiphon as holding that the moon shone with its own light; but who hit upon this notion of the parasitical opaque body in order to explain its phases, I don't know. The observant Thales taught that its light was derived from the sun.

720 *si forte*=fortasse, εἰ τύχοι, and used parenthetically, is found in Cicero, as de orat. III 47; de off. II 70; pro Mil. 104; ad Att. XIV 13 2; ad Q. frat. I 2 7: see Madvig emend. Liv. p. 123: it serves therefore here as a connecting particle in passing to a new hypothesis, and is the same as *Est etiam ut versari possit, ut globus* cet. **723** *eam partem* i.e. the *dimidiam partem* just mentioned. **726** *glomeraminis atque pilai* seems a hendiadys for the *globus pilai* of 720. **727** *Babyl. Chald. doct.*: he speaks of the theory of Berosus, of which Vitruv. IX 2 (4) gives a full account: I will quote the beginning, *Berosus qui a Chaldaeorum civitate sive natione progressus in Asia etiam disciplinam Chaldaicam patefecit, ita est professus, pilam esse ex dimidia parte candentem, reliqua habere caeruleo colore. cum autem cursum itineris sui peragens subiret sub orbem solis, tunc eam radiis et impetu caloris corripi convertique candentem, propter eius proprietatem luminis, ad lumen. cum autem evocata ab solis orbi superiora spectet, tunc inferiorem partem eius, quod candens non sit, propter aeris similitudinem obscuram videri*, and so on: hence his followers were called *Chaldaei*. *Chaldaeum* is of course the gen. plur.: 1063 *canum Molossum*; 405, VI 754 and II 600 *Graium*; I 86 *Danaum*; VI 642 *Siculum*; I 1 *Aeneadum*: *Romanom* occurs on one of the oldest coins. **728** *Astrol. artem* is the system of the astronomers who held the first mentioned theory. **729** *quod pugnat*, a constr. common enough in Cicero: de nat. I 75 *illud video pugnare te*; pro Sex. Rosc. 8 *si hoc solum pugnatur*: so *qui id pugnant* and the like. **733** *aborisci* seems to be found nowhere else: III 155 he has *aboriri*: Lach. compares *ulcisci pacisci nancisci proficisci* etc. **734** *illius in parte*: this use of *pars* in the sense of *locus* comes perhaps from the sense it has in *partes* or *partem suscipere*: reparari in loco illius et partem eius suscipere: the expression therefore comes to the same as Livy III 18 9 *ipse in locum vicemque consulis provolat*: but I know no parallel, as elsewhere *in parte esse* means either 'to have a share of', as Ov. ars I 566; amor. II 16 14; trist. V 14 9: or 'to be a part of', as ex Ponto II 2 104; Juv. XI 29. [But now I find in Plaut. asin. 907 *ut viginti minas Ei det, in parte hac amanti ut liceat ei potirier*: 'that he may enjoy her in his turn': where Lamb. followed by Ussing reads without cause *in partem*, which does occur ibid. 672 *Age sis tu in partem nunciam hunc delude.* Compare too Livy IV 35 6 *ad spem consulatus in partem revocandi* (see Madv. emend. Liv. 99); VII 22 9 *censuram quoque in partem vocari plebes volebat.*] **735** *vincere verbis*: 99 *Et quam difficile id mihi sit pervincere dictis*: Virg. geor. III 289 *verbis ea vincere magnum Quam sit*; but there the words are the same, the sense different. **737—747** seem to depict some pantomimic representation of the four seasons. **737** *Ven. praen.*: IV 1057 *Namque voluptatem praesagit muta cupido*, aptly cited by N. P. Howard. **738** *Pennatus*, i.e. Cupido: 1075 *Pinnigeri . . amoris*; Apul. met. IV 30 *puerum suum pinnatum illum*, and again *ut meae Veneri Cupido pinnatus adsistam tibi*; so V 22 we have the *volatilis dei pinnae roscidae*. Let the 'sibili' of Lachmann then fall on his own prosaic head. **739** *Flora* following on the steps of Zephyr, in advance of Spring, Venus and Cupid, strews the path with flowers: comp. I 7 and 11: Zephyr unlocks the winter ground and flowers at once spring up: comp. too the worship of Psyche, in the character of Venus, in Apul. IV 29. **741** *Inde loci*: see n. to 443. **742** *etesia flab. aquil.* recurs VI 730: 715 *Aut quia sunt aestate aquilones ostia contra, Anni tempore eo qui etesiae esse feruntur.* **743** *Euhius* and *euhoe* are the only well-attested spellings; probably *Euhan* should also be read; for Aen. VI 517 the best mss. have *euhantis*: Mommsen inscr. reg. Neapol. 2913 HIC . PHOEBUS . FUIT . AC . SUPERBUS . EUHAN: the Latins naturally expressed the Greek aspirate in

the middle of the word. 745 *Altitonans* here must mean merely loud-roaring, though applied to Jupiter by Cicero and Ennius it signifies thundering on high; and 'on high' is the usual force in *altivolans altisonus* and the like. 746 *bruma* may be used here in its proper sense of the shortest day: it again brings back the cold which spring had dispelled, and winter returns in earnest. 749 *certo tempore*, every day, that is: see n. to 704.

751—770: solar eclipses may be caused by the moon intercepting the rays, as the astronomers say; but some opaque and invisible body may just as well be the cause; or the sun may lose for the time his own light in passing through spots inimical to it: lunar eclipses may similarly be explained, mutatis mutandis; thus in the first case it will be the earth which keeps from it the sun's rays.—The three theories here offered to explain the eclipses of the sun and moon are quite parallel to those given just above to shew how the moon may receive her light. Epic. l. l. 96 gives us a similar choice, ἔκλειψις ἡλίου καὶ σελήνης δύναται μὲν γίνεσθαι καὶ κατὰ σβέσιν, καθάπερ καὶ παρ' ἡμῖν τοῦτο θεωρεῖται γινόμενον· καὶ δὴ καὶ κατ' ἐπιπρόσθησιν ἄλλων τινῶν, ἢ γῆς ἢ οὐρανοῦ ἤ τινος ἑτέρου τοιούτου: and Diogenes adds just below ἐν δὲ τῇ δυωδεκάτῃ περὶ φύσεως ταῦτα λέγει, καὶ τὸν ἥλιον ἐκλείπειν σελήνης ἐπισκοτούσης, σελήνην δὲ τοῦ τῆς γῆς σκιάσματος· ἀλλὰ καὶ κατ' ἀναχώρησιν. 751 comp. Virg. geor. II 478 *Defectus solis varios lunaeque labores.* *latebras* does not appear to occur elsewhere with this application. 754 *a terris*, admonished by Mr Pearman of Toronto, I take to be 'on the earthward side': a very common sense of *ab*: see n. to VI 1111 *Quattuor a ventis*; and to V 1332 *ab nervis.* *obstr. altum caput* is to put her own high head in the way of the sun, *ei*: this is not a common use of *obstruo*; but comp. Livy V 1 9 *frons in Etruriam spectans auxiliis, siqua forte inde venirent, obstruebatur.* 756 and 765 *Tempore eodem*: so 1045 *Tempore eodem alii facere id non quisse putentur.* 757 *Corpus quod* cet.: comp. 717—719. 758 comp. 652 *atque suos efflavit languidus ignis.* 761 *interstingui*, a very rare word, hardly occurring elsewhere in classical Latin, unless in Apul. met. IV 12. 763 *super*=insuper: see n. to I 649. 764 *rigidas . . umbras*: old poet in Cic. Tusc. I 37 *ubi rigida constat crassa caligo inferum*: 'even darkness which may be felt'. *coni*, the cone of the earth's shadow; so that *coni* would seem to define the *umbras*, as 369 *pericli* does the *cladem*: considering what Epicurus' and Lucretius' conceptions were of the shape of the earth, they must surely have blindly accepted from astronomers this fact of its conical shadow: the force of *Menstrua* is not at once apparent, as she has to pass most months without any eclipse; yet these do depend on her monthly revolution; and if her orbit lay in the plane of the ecliptic, there would of course be an eclipse every full moon. 765 *succurrere*=succedere, used in this its literal sense is almost or quite unexampled; Forc. compares

its metaphorical use in Cic. pro Sex. Roscio 31. 768 *Et tamen*: see n. to 1177 and I 1050. 769 *Cur* cet. as 758 foll. of the sun. 770 *per*: see n. to I 841 *Ignibus ex.*

771—782: having thus explained how all that goes on above in the heaven may take place, the movements of sun and moon and their eclipses, I now come back to the infancy of the world and the earth and proceed to shew what then came to pass. 773 *quicquid*=quicque, as so often in Lucr. *resolvi*: VI 46 *Pleraque ressolui*, where he is talking of the same questions: a rare use of the word, not unlike that in Quintil. inst. VII 9 14 *nec refert quomodo sit facta amphibolia aut quo resolvatur.* 774 Virgil says obscurely *caelique vias* and *caelique meatus*, with reference probably to this passage. 776 *offecto*: see n. to II 156 *Officiuntur.* 777 *neque opinantis*: in 3 other places he uses the more usual *nec opin.*: *neque opinans*, which appears to be very rare, occurs more than once in the bell. Alexandr. and the more homely bell. Africae: see Nipperdey Caes. p. 27, who refers to the epist. ad Brutum I 4 4: it is found too in Lucil. IV 41 Muell. 779 *convisunt* keeps up the metaphor of *conivent* and *aperto lumine*: II 357 *Omnia convisens oculis loca.* 780 *Nunc redeo* cet. from which he had digressed after 501. 781 *in lum. oras* cet.: see n. to 212 and Virgil there quoted. 782 *crerint*=decrerint, is somewhat archaic and used by Cicero in imitating old legal language: yet Catull. 64 150 *germanum amittere crevi.* Aen. XI 560 *quae nunc dubiis committitur auris.*

783—820: first herbage sprang up, then trees, then living things; in the newness of creation the earth produced the larger creatures, birds first, even as now it produces spontaneously worms and the like; then lastly man, whom it fed from its pores with a moisture resembling milk: in the perpetual spring of the new world the children needed nothing more than what the earth thus supplied. 783 *Principio* cet.: in their account of the first production of things the early philosophers would be likely to agree more or less: Zeller says that Anaximander, Parmenides, Anaxagoras, Diogenes of Apollonia and Democritus, all taught the procreation of living things from earth. Lucr. probably had a special eye to Empedocles; thus we are told in Plut. de plac. phil. V 26 and Galen that Empedocles πρῶτα τῶν ζώων τὰ δένδρα ἐκ γῆς ἀναδῦναί φησι, plants with him being imperfect animals. Virgil in geor. II has frequent allusions to Lucr. in return: comp. too the conclusion of his brief epicurean cosmogony, ecl. VI 39 *Incipiant silvae cum primum surgere, cumque Rara per ignaros errent animalia montis.* 786 *per auras* cet.: Virg. geor. II 363 *dum se laetus ad auras Palmes agit laxis per purum immissus habenis.* 788 and 790 *primum* seems to have this force: birds have the rudiments of feathers, quadrupeds have hairs or bristles as soon as they are born before they begin to perform any of the functions of life; so the earth as soon as formed began to put forth its hairs or feathers,

herbage and plants, before it yielded any other production. **791** *mortalia saecla* here = 793 *animalia*, every living thing. **793** *Nam neque* cet. in refutation of the stoical belief: II 1153 *Haud, ut opinor, enim mortalia saecla superne Aurea de caelo demisit funis in arva.* **795** *merito* cet.: comp. 821, and II 998 *Quapropter merito maternum nomen adepta est*: he loves to inculcate this truth. **797** *Multaque* cet.: this too he is fond of dwelling upon, as an important confirmation of his theory as to the beginning of sense and life: II 871 *Quippe videre licet vivos existere vermes Stercore de taetro* cet. and elsewhere. **800** *nova*, when their powers were in their vigorous freshness: 907 *tellure nova caeloque recenti.* **801** *gen. al. var. vol.*: another poetical tautology; repeated 1078. **802** *tempore verno*: comp. 818 819: there was then perpetual spring; *ver illud erat, ver magnus agebat Orbis.*

803 *Folliculos*: this word, meaning originally a small sack, is used for any light envelope rind or husk. *teretis*: comp. IV 58 *Cum teretis ponunt tunicas aestate cicadae*, and n. to I 35. **804** *victum vitamque* recurs 1080; and is found in Cic. Brut. 95; de leg. III 32: Nepos Alcib. I 3 *splendidus non minus in vita quam victu*; [Cic. epist. III 10 9 *delectatio vitae atque victus*; VII 23 4 *vitae victusque nostri*; IX 24 3 *ad communitatem vitae atque victus*; Plaut. capt. 492 *victu et vita.*] **805** *mortalia saecla* is here of course men, of whom as distinguished from all other living things he continues to speak to the end of the paragraph. Lach. strangely misunderstands and corrupts the passage: it is true that 791 *mortalia saecla* means all living things; and so it does probably II 1153; but Lucr. has never any hesitation in using a word or phrase in different senses, when the language permits him to do so, and he quite disregards any consequent ambiguity. *mortalia saecla* is generally with him synonymous with *mortales*; as 988 *mortalia saecla Dulcia linquebant labentis lumina vitae*; 1169 *divom mortalia saecla Egregias animo facies vigilante videbant*; 1238 *se temnunt mortalia saecla.* Euripides in a well-known fragment of the Melanippe keeps the same order as Lucr.: earth and ether Τίκτουσι πάντα κἀνέδωκαν εἰς φάος, Δένδρη πετεινὰ θῆρας οὓς θ' ἅλμη τρέφει, Γένος τε θνητῶν, which may have suggested to Lucr. his *mortalia saecla*, as he was so familiar with Euripides. **806** *umor superabat*: Virg. geor. II 331 *superat tener omnibus umor*: the long epicurean cosmogony in Diod. Sic. I 7 is well worth comparing with this part of Lucr. **808** *uteri*: Censorin. de die nat. 4 9 *Democrito vero Abderitae ex aqua limoque primum visum esse homines procreatos. nec longe secus Epicurus; is enim credidit limo calefacto uteros nescio quos radicibus terrae cohaerentes primum increvisse et infantibus ex se editis ingenitum lactis umorem natura ministrante praebuisse, quos ita educatos et adultos genus hominum propagasse.* *apti* = adepti: so I 448 and VI 1235 *apisci.* Nonius p. 234 quotes instances of *aptus* thus used from Accius Pacuvius Lucilius: add Plaut. capt. 775 *hereditatem sum aptus.* **809**

aestus seems to be the commotion caused by the growing size and consequent heat of the infant; Marullus' *aetas* is possibly right. **810** *petessens*: see n. to III 648 *caedesque petessit.* **811** *ibi* Creech refers to 809 *ubi*: in which case it must be temporal, 'thereupon'; but comp. 815 *Impetus in mammas convertitur*; so that it is better to make *ibi* mean, to the spot where the infants lay, to the opened womb; and Lambinus' *ibus* is not needed. **815** *Impetus ille* which went to feed the child before it was born. With this description comp. Diog. Laert. II 17 γεννᾶσθαι δέ φησι ['Αρχέλαος] τὰ ζῷα ἐκ θερμῆς τῆς γῆς καὶ ἰλὺν παραπλησίαν γάλακτι οἷον τροφὴν ἀνιείσης· οὕτω δὲ καὶ τοὺς ἀνθρώπους ποιῆσαι. **816** Wak. well compares the rhythm of Ovid ars II 475 *Silva domus fuerat, cibus herba, cubilia frondes*: for there are other traces of imitation of Lucr. in this part of Ovid. **818** foll.: comp. Virg. geor. II 336 *Non alios prima crescentis origine mundi Inluxisse dies aliumve habuisse tenorem Crediderim: ver illud erat, ver magnus agebat Orbis et hibernis parcebant flatibus euri, Cum primae lucem pecudes hausere virumque Terrea progenies duris caput extulit arvis . . Nec res hunc tenerae possent perferre laborem, Si non tanta quies iret frigusque caloremque Inter.* **820** *Omnia enim*, and therefore cold and heat and winds too. *rob. sum.*: 895 and Ov. trist. V 2 7.

821—836: thus mother earth produced in the beginning every kind of living thing, till she left off bearing from age; for she and the world change like everything else: all things have a time of vigour and decay. **821** *etiam atque etiam*, I cannot too often repeat this. **823** *animal* is nowhere else used by Lucr. in the sing. as a subst.: *animans* is his word: and here *omne animal* seems equivalent to *omnia animalia*: he says *animalem formam, animale genus, corpus*; but *animantum genus, natura, saecla, volgum turbamque* and the like: see notes 1 to IV 740 *talis natura animantis.* *fudit*: 917 *tellus animalia fudit*; Virg. geor. I 13 *Fudit equom magno tellus percussa tridenti*; Aen. VIII 138 *quem candida Maia...fudit.* **825** *Aerias*: I 12 *Aeriae primum volucres.* *variantibu' formis*, as he elsewhere uses *variae*, simply to express the different species: see n. to I 589; and comp. just above 786 *Arboribus variis.* **827** *Destitit* cet.: II 1150 *effetaque tellus Vix animalia parva creat quae cuncta creavit Saecla deditque ferarum ingentia corpora partu*; Diod. Sic. I 7 6 τὴν δὲ γῆν ἀεὶ μᾶλλον στερεουμένην ὑπό τε τοῦ περὶ τὸν ἥλιον πυρὸς καὶ τῶν πνευμάτων τὸ τελευταῖον μηκέτι δύνασθαι μηδὲν τῶν μειζόνων ζωογονεῖν κ.τ.λ.: [comp. Mayor Juv. XV 69 and 70.] *spatio def. vet.*: comp. II 1174 *spatio aetatis defessa vetusto*, and n. there. **828 829** comp. 834 835. **831** *vertere*: see n. to III 502 *reflexit.* **832** *Namque* cet.: II 77 *Augescunt aliae gentes, aliae minuuntur* cet. **835** *ex alio—alter* = 829 *Ex alio alius*: see n. to IV 689 *Est alio—alter.* **836** is in apposition with what precedes: the earth ceases to be fit for one function in order to be fit for another: the decrease of one thing is needed for the increase

of another. *pote* could hardly stand for *potuit*: *ferre* is understood to *nequit* and *possit* from *tulit*. The stoical moral is as usual much the same as the epicurean: M. Anton. IX 28 *ταὐτά ἐστι τὰ τοῦ κόσμου ἐγκύκλια, ἄνω κάτω, ἐξ αἰῶνος εἰς αἰῶνα.*

837—854: at first the earth tried to produce monsters of all kinds, half-men half-women, creatures without feet or without hands or mouths, or with limbs not separated; so that they could not grow up nor continue their kind: they all therefore perished off. **839** *Androgynum*: Livy XXVII 11 4 *et Sinuessae natum ambiguo inter marem ac feminam sexu infantem, quos androgynos vulgus, ut pleraque, faciliore ad duplicanda verba Graeco sermone, appellat*; but XXXIX 22 5 he uses the Latin compound *semimarem*; as does Ov. met. IV 381, who also calls it *semivir* and *hermaphroditus* which became the usual name. *interutrasque*: see n. to II 518. *nec utrum* i.e. neutrum; as IV 1217 *neque utrum*: see n. there and to II 23. Ov. met. IV 378 *nec femina dici Nec puer ut possint; neutrumque et utrumque videntur*; Mart. XIV 174 *Masculus intravit fontes, emersit utrumque*: comp. too Hor. epist. I 18 9 *medium vitiorum et utrimque reductum.* Lucr. in this passage imitates and partly refutes Empedocles: 238 Πολλὰ *μὲν ἀμφιπρόσωπα καὶ ἀμφίστερν' ἐφύοντο,* Βουγενῆ *ἀνδρόπρωρα, τὰ δ' ἔμπαλιν ἐξανέτελλον* Ἀνδροφυῆ *βούκρανα, μεμιγμένα τῇ μὲν ἀπ' ἀνδρῶν,* Τῇ *δὲ γυναικοφυῆ, σκιεροῖς ἠσκημένα γυίοις*: with the beginning and end of this passage Lucr. is quite in accord; the Βουγενῆ—*βούκρανα* he wholly disallows, as we shall see 878 foll. where he triumphantly refutes such notions. The *βουγενῆ ἀνδρόπρωρα* was very famous: the great champion of the final cause Aristotle phys. II 8 and his commentators Themistius and Simplicius assail it. **840** *Orba pedum partim*: Virg. geor. IV 310 *Trunca pedum primo. manuum*: the gen. after *viduata* is strange, and apparently after the analogy of adjectives like in meaning, *expers* etc.; though II 843 he has *secreta teporis*: it is possible that the *εὔνιδες ὤμων* of Empedocles 233, whom he here imitates, may have suggested the genitive. [Comp. Silius VIII 590 *desolataeque virorum Eridani gentes*: and see Draeger hist. synt. I p. 454.] **840 841** here too Lucr. seems to be imitating the manner of Empedocles, while differing entirely in the matter: 232 Ἧι *πολλαὶ μὲν κόρσαι ἀναύχενες ἐβλάστησαν.* Γυμνοὶ *δ' ἐπλάζοντο βραχίονες εὔνιδες ὤμων,* Ὄμματά *τ' οἶα πλανᾶτο πενητεύοντα μετώπων*: such a wandering about of single organs and limbs and their subsequent union Lucr. would have thought absurd; for Empedocles continues Αὐτὰρ *ἐπεὶ κατὰ μεῖζον ἐμίσγετο δαίμονι δαίμων,* Ταῦτά *τε συμπίπτεσκον ὅπῃ συνέκυρσεν ἕκαστα,* Ἄλλα *τε πρὸς τοῖς πολλὰ διηνεκὲς ἐξεγένοντο*: and so Censorinus 4 7 *Empedocles autem egregio suo carmine, quod eiusmodi esse praedicat Lucretius* ut vix humana videatur stirpe creatus, *tale quiddam confirmat. primo membra singula ex terra quasi praegnate passim edita deinde coisse et effecisse solidi hominis materiam igni simul et umore permixtam.* **844** *quod for. us.*: see n. to IV 831 *quae foret usus.* **846** *absterruit* has the same force as IV 1234 *cuiquam Absterrent* and 1064 *Absterrere sibi*, where see note. **847** comp. I 564 *quibus possint aevi contingere florem.* **849** *debere*, the sole instance in Lucretius of a hypermetrical v.; once only too, IV 741 *equi atque*, he elides an iambus: both these licences are far commoner in Virgil. The elision at the end of a v. is absolutely unknown to Homer: indeed *οὐκ οἶδ'* in an epigram of Callimachus seems the only certain instance in Greek hexameter verse. Whoever, Greek or Latin, introduced the practice, must have done it through misapprehending Homer; for surely his verse is a dactylic hexam. catal. **850 and 856** *procudere*: see n. to II 1115. **852** *remissis* gives an excellent sense: IV 1114 *Membra voluptatis dum vi labefacta liquescunt*: comp. its use in Prop. V (IV) 8 53; Ov. her. XIX 197; met. IV 229; Sen. Oed. 442 *Thyiades oestro membra remissae*; Thyest. 634 *si metu corpus rigens Remittet artus.* **853** *habere* i.e. utrumque: *uterque* is in the dependent clause according to a favourite habit of Lucr.: see n. to I 15 *capta.. quamque.* With the constr. *ut sint—habereque* comp. 446 *Hoc est, a terris altum secernere caelum, Et sorsum mare uti secreto umore pateret.*

855—877: many races of regularly organised creatures must have died off, because they wanted either some natural power by which to protect themselves, or could not be turned to use by man and be saved thereby: these fell a prey to others and disappeared, unable to endure the struggle for existence. **855** *animantum* are opposed to the monstrous abortions last spoken of: it was not a natural unfitness for life, but outward circumstances that prevented their continuance. Granting Lucretius the premisses from which he starts, his subsequent deductions are eminently able and logical. **856** *prŏpagando*, 850 *prōpagando*: he has ŏ five times, ō twice; but always the subst. *prŏpago*: VI 1027 *prŏpellat*, 1029 *prōpellat*; II 276 *rĕfrenavit*, 283 *rĕfrenatur*: he appears to seek variety of this kind. *prolem*, their breed or race=850 *saecla.* **857** *vesci vit. au.*: see n. to 72 *vesci*: Aen. I 546 *si vescitur aura Aetheria.* **858** *denique* here is not a mere idiomatical redundancy as in I 278 and the passages there cited, but means, 'at least'; if no higher quality, well then agility: Hor. sat. I 2 133 *Ne nummi pereant aut puga aut denique fama*; Caes. bell. Gall. II 33 2 *nostros praesidia deducturos aut denique indiligentius servaturos crediderant.* **860** *ex util. manent* is probably imitated in the culex 64 *lapidum nec fulgor in ulla Cognitus utilitate manet*, as what precedes and follows abounds in paraphrases of Lucr. **862** *genus acre le.*: Ov. fasti IV 215 *cur huic genus acre, leones* cet.: a passage shewing much imitation of II 600 foll.: Virg. geor. III 264 *genus acre luporum*, II 151 *saeva leonum Semina.* **864** *levisomna*, an elegant ἅπαξ λεγόμ. *cum pect.*: see n. to I 755. **865** *veterino*: 890 *veterino semine equorum*: see Forc. s. v. **866** comp. VI 1237 *Lanigeras tamquam pecudes et bucera saecla*; II 662 *Lanigerae*

pecudes et equorum duellica proles Buceriaeque greges; Ov. met. VI 395 *Lanigerosque greges armentaque bucera.* **869** *pub. parta* are accus. **873** *quare*=quamobrem, or ut ob eam rem: II 970 *quorum*=ita ut eorum; IV 116 *quorum*=ut eorum; V 3 *qui*=ut is; VI 821 *quo simul ac*=et, simul atque eo: Livy XXIX 15 13 *nihil se, quare perire merito deberent, admisisse.* **875** *praed. luc. iac.*: Sen. Herc. Fur. 1186 *Cui praeda iacui?* [Livy XXVII 44 4 *castra invadere praedae relicta.*] N. P. Howard compares Homer's ἕλωρ καὶ κύρμα.

878—924: but centaurs and the like with twofold natures cannot exist: the horse has reached maturity when the boy is scarcely yet weaned; and is worn out ere the other is grown to manhood: and so with Scyllas, half-maid half-fish: then since fire burns lions like other creatures, how can a chimera exist breathing out flame: earth in its freshness produced many things, but not these figments of poets or philosophers.—This passage is extremely well and acutely reasoned out: he covertly refutes Empedocles' notion of the βουγενῆ ἀνδρόπρωρα and the ἀνδροφυῆ βούκρανα which are as impossible as the centaurs Scyllas and chimeras of the poets. The man-woman or hermaphrodite is possible enough, because the natures of man and woman are not incompatible; and doubtless it and other monstrous things tried at first to continue existence; but the creatures here described never could begin to come into being. **881** *potissit*: see n. to I 665 *potesse.* **882** occurred IV 53. **885** *Ub. mam. qu.*: Ov. met. VII 321 *lactantiaque ubera quaerit.* **886** and **896** *aet. sen.*: see n. to III 772. **888** *puero illi*, the *puer* of 884. **889** comp. Aen. VIII 160 *Tum mihi prima genas vestibat flore iuventa*: and X 324: *lan. malas* occurs in Ovid more than once. **891** *Confieri, esse*: Lucr. is fond of such unions; III 787 *crescat et insit*; 788 *oriri, esse*; 791 *esse, innasci*; 795 *esse et crescere*; 797 *durare genique*: and here *Conf. et esse* would be more natural; but *neque* connects the two inseparable notions just as in Aen. XI 43 *Invidit fortuna mihi ne regna videres Nostra neque ad sedes victor veherere paternas*: comp. too Ov. met. III 116 *Ne cape . . nec te civilibus insere bellis*, 'don't take, and so get involved in civil war': Hor. od. I 11 1 *Tu ne quaesieris . . nec Temptaris* cet. i.e. temptando: comp. too I 479 *constare neque esse* and the often recurring *Non radii solis neque lucida tela diei.* **892** *rabidis* cet.: Wak. compares Sen. Med. 350 *Siculi virgo Pelori Rabidos utero succincta canes*; Ov. amores III 12 21 *Scylla. .Pube premit rabidos inguinibusque canes.* *succinctas*: comp. Tib. (Lygd.) III 4 89; Virg. ecl. VI 75. **894** *discordia*: Lach. after Heinsius quotes Colum. VI 36 2 *ut discordantem utero suo generis alieni stirpem insitam facile recipiat ac perferat.* **897** *unis*: see n. to III 616; and Cic. pro Flacco 63 *unis moribus*, quoted to II 159 *ipsa, una.* **898** *neque sunt* i.e. iis: comp. n. to I 718. **899** *cicuta* cet.: see n. to IV 641, where hellebore is said to do the same, and passages there quoted. **905 906** translated from

Il. Z 181 Πρόσθε λέων, ὄπιθεν δὲ δράκων, μέσση δὲ χίμαιρα Δεινὸν ἀποπνείουσα πυρὸς μένος αἰθομένοιο. **906** *Ore foras* occurs four times in Lucr. **907** comp. Juvenal VI 11 *Quippe aliter tunc orbe novo caeloque recenti.* **908** *qui fingit*: he must allude chiefly to Empedocles, as we have shewn above: for the βουγενῆ ἀνδρόπρωρα is so much spoken of that we must have heard, had any other physiologist of note held similar language: II 700 *Nec tamen omnimodis conecti* cet. he touches on the same question as here, 702 centaurs, *Semiferas hominum species*, 704 Scyllas, *conecti terrestria membra marinis*, 705 *flammam taetro spirantis ore Chimaeras.* **911** *Aurea tum dicat* cet.: yet Virgil ventures to say *atque auro plurima fluxit*, which may be an unconscious reminiscence of Lucr. **913** *impete*: see n. to IV 416. **913** foll. comp. I 199 *cur homines tantos natura parare Non potuit, pedibus qui pontum per vada possent Transire* cet. **919** *compactaque*, as 880. **921** is made up of I 889 *Herbarum genera et fruges*, and II 699 *Humanum genus et fruges arbustaque laeta.* **922** *complexa* is of course passive, as II 154 *complexa meant inter se*; just like *implexus perplexus*: Cic. pro Sex. Rosc. 37 *quo uno maleficio scelera omnia complexa esse videantur*; Vitruv. X 2 (6) 11 *complectit et compegit*; [Plaut. Amph. 286 *Qui complexus cum Alcumena cubat.*] **923** *Sed res quaeque* cet.: comp. II 718 *Sed ne forte putes animalia sola teneri Legibus hisce, ea res ratio disterminat omnis. Nam veluti tota natura dissimiles sunt Inter se genitae res quaeque, ita quamque necessest* cet. which seems to confirm *res* in our passage.

925—987: but men were then much hardier than they are now: they lived like the beasts of the field; ignorant of tillage, they fed on what the earth supplied of itself, acorns and berries; and drank of the running waters: they were without fire or clothes or houses, without law government or marriage: they slept on the ground, not fearing the dark, to which they had been used from childhood; they rather dreaded real danger from the fiercest beasts. **926** *Durius* cet.: Virgil's *homines durum genus* and *Terrea progenies.* *quod* is of course the relative,= *quippe quod* cet. or *ut pote a tellure productum* as Creech interprets. **928** *Fundatum* cet.: IV 827 *fastigia posse Surarum ac feminum pedibus fundata plicari, Bracchia tum porro validis ex apta lacertis*: Arnob. II 16 imitates Lucr. as his wont is. **931** *volventia*: VI 345 *Omnia coniciens in eum volventia cursum*: Virgil has *volventia plaustra, volventibus annis*; culex 161 *volvens*, 193 *volventia membra draconis*; Ovid *volventem annum*: [comp. Livy ap. Sen. rhet. suas. VI 17 *caeco volvente fluctu*; Cic. pro Quinct. 40 *anno vertente*; Plaut. asin. 400 *quassanti capite*, to which Ussing cites Bacch. 301 *capitibus quassantibus*; Caecil. 271 *quassante capite.* See Roby gramm. pt. II p. LXVII at top.] '*Volventia*=quae volvuntur: Virg. *saxa rotantia*; Cic. de fin. II 31 *voluptate, stante an movente*: so *pascentes capellas*; *vehens invehens praetervehens*; Sall. Iug. 79 6 and 93 4 *gignentium*: Caes. bell. Gall. III 12 1 may not

minuente aestu be so explained?' R. Shilleto. 932 *Volgivago*: IV 1071 *Volgivagaque vagus Venere.* 934 *scibat*: he has *scibant* thrice, *accibant, saevibat, hauribant, poenibat*, the last in VI 1241, all the rest in the latter part of this book. *mol. arva*: Virg. geor. I 494 *incurvo terram molitus aratro*: Aen. VII 157 *humili designat moenia fossa Moliturque locum*, the word appears to have pretty much the same force, 'carefully prepares for the purpose in hand.' 935 *Nec nova* cet.: 1366 *Et nova defodere in terram virgulta per agros.* 937 *Quod sol* cet.: Macrob. sat. VI 1 65 compares Virg. geor. II 500 *Quos rami fructus, quos ipsa volentia rura Sponte tulere sua, carpsit.* 938 *plac. pec.*: Horace more coarsely sat. II 2 17 *cum sale panis Latrantem stomachum bene leniet*; 8 5 *Quae prima iratum ventrem placaverit esca.* 939 *cur. cor.*: II 31 *iucunde corpora curant*: acorns and arbute berries are thus joined by Virg. geor. I 148 *cum iam glandes atque arbuta sacrae Deficerent silvae et victum Dodona negaret*; and Ov. met. I 102 *per se dabat omnia tellus... Arbuteos fetus . . Et quae deciderant patula Iovis arbore glandes.* 940 *nunc hiberno tempore* cet.: and at the present day in December you may see large tracts of the Peloponnese covered with the arbute trees laden with their bright scarlet fruit. 944 *ampla*: Wak. quotes Hor. sat. II 2 101 *Divitiasque habeo tribus amplas regibus.* 946 *decursus aquai* or *aquarum* is a favourite phrase which he uses four times. 947 *Claru' citat* is a very graphic expression: the clear rills tumbling down from the high hills in those climates are audible from a great distance, especially *Per loca pastorum deserta atque otia dia*: Lach. in his sarcastic and most unsatisfactory note says 'feras decursum aquae, qui vix audiri potest, frustra clare audire iubet'. Whatever it may be with the waters from the high hills of Berlin, those from the hills of Greece and Italy can be heard far enough. Ritschl opusc. II 434 shews that *Clarigitat* of Lach. is not legitimately formed from *clarigo*, and, if it were, that *clarigo*, which denotes in Pliny's words an ambassador's 'res raptas clare repetere' from an enemy, ill suits our passage. But I must say he quite fails to convince me when he reads *largus* for *clarus* 'quod non ea est decurrendi notio quae suapte natura cum auditione coniuncta sit, ut cum *vox clara* vel *tuba* dicitur cet.': to me the point of the passage greatly depends on *clarus*: it means, to use Cicero's words, pro Cluent. 134, 'clara voce, ut omnis contio audire possit' citare: Hor. od. III 13 15 *unde loquaces Lymphae desiliunt tuae*; epod. 16 47 *montibus altis Levis crepante lympha desilit pede*, are almost comments on Lucr.: surely there 'decurrendi notio cum auditione coniuncta est': then is not *largus* weak, followed in 950 by *proluvie larga*? and the alliteration of moment? *Claru'*: Aen. VII 141 *ter caelo clarus ab alto Intonuit.*

948 *silv. templa Nymph.* must be such rocky haunts as he describes IV 580 *Haec loca capripedes satyros nymphasque tenere Finitimi fingunt* cet. and as Virgil paints in Aen. I 166 *Fronte sub adversa scopulis pendentibus antrum, Intus aquae dulces vivoque sedilia saxo, Nympharum domus*: *templa* here, like *Acherusia templa, mentis templa*, is a secondary meaning derived from the primary *caelestia templa*: Theocr. id. VII 136 τὸ δ' ἐγγύθεν ἱερὸν ὕδωρ Νυμφᾶν ἐξ ἄντροιο κατειβόμενον κελάρυζεν: comp. too Pacuv. 309 *scrupea saxa Bacchi Templa prope adgredite.* 950 *um. saxa, Um. sa.*: see n. to II 955; and notice the fine effect of this repetition and the alliteration of the liquids *l* and *r*. 955 *Sed nemora* cet.: 992 *Et nemora ac montis gemitu silvasque replebat*: see n. to 41 *Per nemora ac montes magnos silvasque profundas.* 958 *neque ullis Moribus* cet.: Aen. VIII 316 *Quis neque mos neque cultus erat*, amid other traces of imitation; and with this v. and 961 *Sponte sua* cet. Aen. VII 203 *Saturni gentem, haut vinclo nec legibus aequam, Sponte sua veterisque dei se more tenentem.* 965 see n. to III 551. 968 *pon. cl.*: Sen. Herc. Oet. 787 *clavae pondus*; [Silius II 246 *nodosae pondera clavae.*] 969 *pauca*: 985 *Spumigeri suis adventu validique leonis.* 970 *sic*=sicut erant: comp. Ov. fasti VI 331 *Vesta iacet placidamque capit secura quietem, Sicut erat, positum caespite fulta caput*: so Aen. I 225 *sic vertice caeli Constitit, sic*=sicut erat i.e. *Despiciens mare* cet. where Conington refers to VII 668 *sic regia tecta subibat*, i.e. *pedes, tegumen torquens* cet.: but at the same time it may have the other meaning into which this so readily passes, '*sic* pro leviter et negligenter, quod Graeci οὕτως dicunt' Donatus to Ter. Andr. 175: thus in Ovid l. l. *Sicut erat*=sic temere: *sic* will then have much the force of Horace's *sic temere, positum sic*; of Sen. Hipp. 394 *Sic temere iactae comae*; of Persius' *sic poeta prodirem*; of the mimetic οὕτως in Greek; and of *sic* in many passages of Plautus and Terence, as Amphitr. 117 *ego huc processi sic cum servili schema.* 973 *Nec plangore* cet.: the stoic Manilius, who often attempts while imitating to refute Lucr., appears to allude to this passage in I 66 *Nam rudis ante illos nullo discrimine vita...Tum velut amissis maerens, tum laeta renatis Sideribus; variosque dies incertaque noctis Tempora, nec similis umbras iam sole regresso, Iam propiore, suis poterant discernere causis*: Lucr. is assuredly the more reasonable: Stat. Theb. IV 282 foll. harps on the same theme: *Hi lucis stupuisse vices noctisque feruntur Nubila et occiduum longe Titana secuti Desperasse diem*; so that Lucr. on his part is probably assailing some well-known theory. 975 *respectabant*=expectabant: VI 1234 *Funera respectans*; Catull. 11 21 *Nec meum respectet, ut ante, amorem*; Cic. pro Planc. 45. *som. sep.*: see n. to I 133 *somnoque sepultis.* 979 *Non erat ut fieri posset*=non poterat fieri: see n. to I 620 *Nil erit ut distet.* *mirarier, diffidere*, as so often in Lucr.=nomin. subst.: see n. to I 331 *Quod tibi cognosse.* 983 *Infestam fac.*: 1124 *iter infestum fecere viai*: it is a favourite phrase of Livy; who also has *infestum efficere, reddere, habere.* 985 *validique*: see n. to II 825 *uno varioque*; the plur. *Hospitibus* is in favour of the *que* of mss. 986 *intempesta*:

see Conington to geor. I 247; and comp. Apul. met. II 25 *cum ecce crepusculum et nox provecta et nox altior et dein concubia altiora et iam nox intempesta.*

988—1010: men then died much about the same as now: here and there they were mangled by wild beasts and perished from want of help; but then many thousands did not fall in battle in a single day; ships too and therefore shipwrecks were unknown; want and ignorance then caused some deaths; as now do luxury and malice.

988 *nimio plus* is generally used absolutely for 'too much'; but sometimes comparatively as here; Plaut. Bacch. 122 *Quem sapere nimio censui plus quam Thalem*: 150 *nimio satiust*; Livy I 2 3 *nimio plus quam satis tutum esset*; II 37 4 *nimio plus quam velim*; XXIX 33 4 *nimio maior*: Lucr. VI 1196 *Nec nimio post*: see Draeger hist. synt. I p. 521 at top. *mortalia saecla* = mortales, as 805, where see note, 1169 and 1238. **989** *linq. lum. vitae*: III 542 *Lumina qui lincunt*; 1025 *Lumina...reliquit*; Cic. de suo cons. 24 *vitalia lumina liquit*; frag. de glor. *lumina linquens*; Naev. 31 *lino lincunt lumina.* **993** *Viva* cet.: Accius 226 *natis sepulcro ipse est parens*; Ov. met. VI 664 *Egerere inde dapes demersaque viscera gestit: Flet modo seque vocat bustum miserabile nati*; XIII 865 *Viscera viva traham*; XV 525 *Viscera viva trahi*; Enn. ann. 141 *Vulturus...miserum mandebat homonem. Heu quam crudeli condebat membra sepulcro*; Spenser fa. qu. II 8 16 *To be entombed in the raven or the kight*; [Macbeth III 4 72 *our monuments Shall be the maws of kites*: see Furness var. n.;] Pope essay III 162 *Of half that live the butcher and the tomb*: before them all Gorgias γύπες ἔμψυχοι τάφοι. There is no reason for understanding *viscera* in any but the sense it always has in Lucr. viz. the flesh, or all between the skin and bones, either here or Tusc. II 34: this sense it has too in Ovid l. l.: *v* often in alliteration expresses indignant pity; as Aen. VI 833; Cic. pro Sest. 48 *fortissimum virum, ne videret victorem vivus inimicum, eadem sibi manu vitam exhausisse*, and just before this the same effect is produced by the union of *p* and *v*: 59 *vivus, ut aiunt, est et videns cum victu ac vestitu suo publicatus.* **997** *Donique* as 708, 723 and II 1116: the pluperf. after *donec* is quite unexampled in Lucr.: perhaps *privarunt* should be read, unless the pluperf. is caused by the attraction of *servarat* and *accibant.* *vermina*: Paulus Fest. p. 374 '*vermina* dicuntur dolores corporis cum quodam minuto motu quasi a vermibus scindatur. hic dolor Graece στρόφος dicitur'. **998** *vellent* i.e. poscerent: Bentl. compares Sil. XI 166 *medicinam vulnera poscunt.* **999** *sub signis ducta*: Cic. ad Att. XVI 8 2 *Antonium cum legione Alaudarum ad urbem pergere...legionem sub signis ducere*; Plaut. Pseud. 761 *Omnis ordine ego sub signis ducam legiones meas Ave sinistra*: it means ready for battle; and is a very favourite expression of Livy; who also says *sub signis venire, incedere, subire, irrumpere, in acie stare, urbem intrare*: Tac. hist. III 63 *non sine decore, sed sub signis vexillisque*: [comp. Marquardt R. St. II p. 350: the soldier followed after (*sub*) the *signa.*] **1000** comp. 95 *Una dies dabit exitio*: Ov. fasti II 236 *Ad bellum missos perdidit una dies*; Enn. ann. 297 [*Milia*] *multa dies in bello conficit unus.* **1001** N. P. Howard appositely quotes Labb. gloss. 'lido κρούω, laedo βλάπτω' in support of the ms. *lidebant*: I strongly incline now to think he is right; as Lucr. prob. had in mind Accius 33 *Flucti immisericordes iacere taetra ad saxa adlidere*: [*allido* seems the regular word: Caes. b. civ. III 27 2 *pars ad scopulos allisa interficeretur.*] **1002** *temere* cet.: see II 1060 and n. there. **1003** *minas pon.*: Prop. IV (III) 10 6 *Ponat et in sicco molliter unda minas.* **1004 1005** comp. II 559 *Subdola cum ridet placidi pellacia ponti.* **1006** I keep, as I have corrected it; for Manil. I 87 *Et vagus in caecum penetravit navita pontum*, seems a reminiscence of Lucr. **1007** *Tum deinde*: see n. to III 529: Sen. epist. 101 4 *tum deinde*; 95 35, 115 4 and Val. Flacc. VIII 109 *tunc deinde*; Sen. epist. 74 23 and 117 1 *deinde tunc.* **1008** *copia mersat*: VI 1176 *sitis arida corpora mersans* is another bold application of this word: *mergo* is used as *merso* here; see Mayor to Juv. X 57. **1010** *nurui*, for the sake of her money; Juv. XIV 220 *Elatam iam crede nurum, si limina vestra Mortifera cum dote subit*: *nuptae* would do as well for the sense; or *patri*: Varro sat. men. 496 Buech. *nunc quis patrem decem annorum natus non modo aufert sed tollit—nisi veneno*; Sen. epist. 119 6 *quia propter illas nulli venenum filius, nulli uxor impegit*; or *matri*: Hor. sat. II 3 131 *Cum laqueo uxorem interemis matremque veneno*: but the ductus litterarum is in favour of *nurui.* *ipsi*, which as a nomin. is quite meaningless, thus gains much point, adding at the same time emphasis and denoting 'in the stead of': comp. VI 659 *oculos invadit in ipsos*; 1126 *Aut in aquas cadit aut fruges persidit in ipsas*; Livy I 37 2 *cum hostem effugissent, in flumine ipso periere*; XXVII 13 5 *omitto ex quibus gloriari potestis: cuius et ipsius pudere ac paenitere vos oportet, referam*; perhaps Aen. V 410 *Quid si quis caestus ipsius et Herculis arma Vidisset*: or it may mean 'to her to whom it least should be given': Aen. XI 557 *Alma, tibi hanc...Ipse pater famulam voveo*; and with one or other of these meanings it may join that of singling her out of all people; comp. IV 651 *ipsoque palato*; 1044 and VI 1207 *partis genitalis corporis ipsas*; VI 1175 *ipso ore patente*, and n. there: Ov. met. I 694 *Ortygiam studiis ipsaque colebat Virginitate deam.*

[The following sentences are extracted from a correspondence dated April 1884 with Professor Palmer of Dublin. Prof. Palmer had conjectured *medici nunc dant sollertius usi*: see Hermathena vol. V p. 306. 'Your suggestion is very attractive. I have long thought that *ipsi* at the end of the line has no proper sense... Lucr. would probably write *ussi* which might be easily confused with *ipsi*, written *issi*, a very ancient vulgarism. I do not pronounce an

opinion at present for or against *medici*.... Perhaps Lucr. may have written something like *nunc dant sollertius arte medentes*; or *saepe medentes*, which might help to explain the loss at the end of the v. if it was confused with the preceding verse.']

1011—1027: next the use of huts and skins and fire softened their bodies, marriage and the ties of family their tempers; then neighbours made treaties of friendship and alliance, which mostly they observed, though not always. **1012** foll. as said in notes 1 I feel sure a v. has fallen out here; as Ov. ars II 473—478 has imitated Lucr.: comp. with *Cognita sunt*, and 1014 *Tum genus* cet. Ovid's *Tum genus humanum solis errabat in agris...Silva domus fuerat, cibus herba, cubilia frondes, Iamque diu nulli cognitus alter erat*; for he here imitates as well 816 *Terra cibum pueris, vestem vapor, herba cubile Praebebat*. **1015** *Ignis*: Darwin, desc. of man I p. 137, calls the discovery of fire the greatest probably excepting language ever made by man. Lucr. sees all the importance of language and fire. *alsia*: the comparative *alsius* is found in Cicero, *alsiosus* in Varro and Pliny. **1016** *caeli sub tegmine*: I 988 *sub caeli tegmine*, II 663 *sub tegmine caeli*. **1018** *ing. freg. sup.*: Ovid tristia III 14 33 with a different force *Ingenium fregere meum mala*. **1020** *nec laed. nec viol.* is inculcated again and again by Epic. in Diog. x 150 τὸ τῆς φύσεως δίκαιόν ἐστι σύμβολον τοῦ συμφέροντος εἰς τὸ μὴ βλάπτειν ἀλλήλους μηδὲ βλάπτεσθαι. ὅσα τῶν ζῴων μὴ ἠδύνατο συνθήκας ποιεῖσθαι τὰς ὑπὲρ τοῦ μὴ βλάπτειν ἄλληλα μηδὲ βλάπτεσθαι, πρὸς ταῦτα οὐθέν ἐστιν οὔτε δίκαιον οὔτ' ἄδικον. ὡσαύτως δὲ καὶ τῶν ἐθνῶν ὅσα μὴ ἠδύνατο ἢ μὴ ἐβούλετο τὰς συνθήκας ποιεῖσθαι τὰς ὑπὲρ τοῦ μὴ βλάπτειν μηδὲ βλάπτεσθαι κ.τ.λ. Lucr. presents only the fair side of the theory: the speaker in Plato de rep. II 2 gives a harsher explanation than even Epicurus does why men think λυσιτελεῖν ξυνθέσθαι ἀλλήλοις μήτ' ἀδικεῖν μήτ' ἀδικεῖσθαι. **1022** *balbe* seems here to denote mere inarticulate cries. **1025** *bona magnaque pars*: Wak. quotes from Terence and Valerius Max. instances of this pleonasm: Lucr. as we have seen loves the like. **1027** comp. 856 and 850. *propago* = 'propagatio: gloss. vetus *propago* ἡ ἐπίδοσις τοῦ γένους' N. P. Howard: comp. Columella's *propagine proveniunt arbores*, the literal sense of the term.

1028—1090: nature and need prompted men to the use of speech; for all creatures feel their natural power; the calf will butt before his horns protrude; and so with other beasts birds etc.: it is absurd to suppose that one man could have invented speech; for how could he himself know what he wanted to teach, or persuade others to learn? and why should not man take to applying different sounds to denote different things, when brute beasts use different cries to express different passions? as we see in the case of dogs horses seagulls crows and other creatures.—He now comes to the question 'quaeri solitum' says Gellius x 4 'aput philosophos φύσει τὰ ὀνόματα sint ἢ θέσει'. Epic. himself in Diog. Laert. x 75 says τὰ ὀνόματα ἐξ ἀρχῆς μὴ θέσει γενέσθαι, ἀλλ' αὐτὰς τὰς φύσεις τῶν ἀνθρώπων καθ' ἕκαστα ἔθνη ἴδια πασχούσας πάθη καὶ ἴδια λαμβανούσας φαντάσματα ἰδίως τὸν ἀέρα ἐκπέμπειν κ.τ.λ.: Plato in the Cratylus appears to agree pretty nearly with Epicurus and Lucr. as well as Lucretius' contemporary the learned pythagorean Nigidius Figulus: Gellius l. l. *nomina verbaque non positu fortuito, sed quadam vi et ratione naturae facta esse P. Nigidius in grammaticis commentariis docet, rem sane in philosophiae dissertationibus celebrem*. Comp. Darwin's desc. of man I p. 54—62: his views are much in accordance with those of Lucr. Democritus and Aristotle seem to have held the contrary view. **1029** *util. expr.*: nature forced them to utter general sounds; experience of their use made them give definite terms to definite things. *nom. rerum*: Hor. sat. I 3 99—111, an epicurean passage, has clearly had Lucr. before him: with this and 1058 *Pro vario sensu varia res voce notaret* comp. l. l. 103 *Donec verba quibus voces sensusque notarent, Nominaque invenere*; then with Hor. l. l. 99 *Cum prorepserunt primis animalia terris, Mutum et turpe pecus* comp. 791 foll.; with *glandem atque cubilia propter Unguibus et pugnis, dein fustibus, atque ita porro Pugnabant armis quae post fabricaverat usus* comp. 1416 *Sic odium coepit glandis, sic illa relicta Strata cubilia sunt——obiret*, 1283 *Arma antiqua manus ungues* cet.; with *Oppida coeperunt munire* comp. 1108 *Condere coeperunt urbis*; with 109 *rapientis more ferarum* comp. 932 *vitam tractabant more ferarum*; with 111 *Iura inventa metu* comp. 1144 *Iuraque constituere* and all that follows; then Horace concludes with the favourite Lucretian expression *fateare necesse est*.

1031 *infantia* in its primary sense; Cicero uses it metaphorically, but with much the same force; see Forc. **1033—1035**: comp. Ov. hal. 3—9. **1033** *quoad* or *quod*, as II 248 *quod cernere possis* = quatenus. *abuti*=uti: *vim*; but II 653 *nomine abuti*: see n. to III 956: Plautus and Terence too have the accus., [and so has Cato.] **1035** *inurget* occurs also in Apul. met. VIII 10. **1036** *scymni*: a curious use of the Greek synonyme of *catuli*. **1040** *auxiliatum*: lexicons cite no other instance of this word. **1041** *tum*, when speech first came into use. **1045** *Temp. eod.*: comp. 765 and 756. **1047** *unde insita* cet.: 182 *Notities divis hominum unde est insita primum, Quid vellent facere ut scirent animoque viderent*, where see notes: *notities* here, as there, is a poetical substitute for Epicurus' technical πρόληψις. **1049** *scirēt*: see notes 1, where this reading is shewn to be necessary; and n. to II 27 *fulgēt*. **1057** *vigeret*: Livy XXXIX 40 7 *nec is tantum cuius lingua vivo eo viguerit*. **1061** *gaudia gliscunt*: Pacuv. 294 *gliscit gaudium*.
1063 foll.: Darwin desc. of man I. p. 54 'the dog since being domesticated has learnt to bark in at least four or five distinct tones'.
1063 *Inritata, magna, Mollia, nudantia*: see n. to 13. *Inritata, ricta*,
1065 *restricta*: Plaut. capt. 485 *Ne canem quidem inritatam voluit quis-*

quam imitarier, Saltem, si non adriderent, dentes ut restringerent: Donatus to Andr. 597 '*irritatus.* ducitur autem verbum a canibus qui restrictis dentibus hanc litteram *r* imitantur': Lucil. I 32 Muell. *Irritata canes, quam homo, quam* (i.e. litteram *r*) *planiu' dicit.* **1064** *ricta*: VI 1195 *rictum*; and so Cic. Verr. IV 94: IV 1213 *vulta.* *restricta* by drawing back the soft lips: Apul. apol. p. 392 *Restrictis forte si labellis riseris.* **1066** *Et cum*, **1071** *Et cum*, **1077** *Et cum*, **1082** *Et quom*: see n. to I 281 *Et cum mollis.* **1069** *Suspensis*: III 196 *aura suspensa levisque*: so *suspenso pede, gradu* and the like: it seems to mean, hardly allowed to fall. *teneros* is proleptic; they make a pretence of biting, but so as to shew at the same time that they mean no harm. [Comp. the last two verses of an imitation of Catullus' third poem quoted in Hermes vol. I p. 68 *Nec sevire potes nec insilire, Nec blandis mihi morsibus renides.*] **1070** *gannitu, adulant*, **1071** *baubantur* all express primarily sounds made by dogs, as Nonius explains s. vv. with reference to Lucr. **1074** *equus iuvencus*: Pliny X 146 *iuvencae*=iuvenes gallinae: Hor. od. II 8 21 *Te suis matres metuunt iuvencis*, of young men. **1075** *Pinn. am.*: 738 *Pennatus*: Virgil has *aligerum amorem.* **1080** *in salso*: often as *salsus* is an epithet to *mare, gurges, fluctus* and the like, I do not elsewhere find it, as here, used for a subst. *vic. vit.*: see n. to 804. **1084** *cornicum* cet.: Virg. geor. I 388 foll. and 410 foll. has some resemblance to this passage. *cornices* and *corvi* are clearly used here with poetical licence, and between them include the whole crow kind: *greges* would be singularly inappropriate to the primary sense of *corvi.* **1088** *Muta*, as 1059, *pecudes mutae*, has its proper force, uttering inarticulate sounds.

1091—1104: lightning first gave fire to men; or else the friction of trees rubbing together: cooking they would learn from the sun, which they would see softening and ripening things.—Every one will agree with Lach. that 1091—1160 are subsequent additions by the poet, of the same nature as those we have already so often had: these three paragraphs have no connexion with the context, either before or after: 1161 *Nunc quae* naturally follows 1090; for at 73 he promised to discuss the question of the gods immediately after that of the invention of speech; again in this our present passage he speaks of the first discovery of fire, though 1011 it was already in general use; again 1105—1160 he mentions cities kings magistrates and laws, though not till 1361 does he treat of the beginning of agriculture; and then 1440 he speaks of fortresses and the division of lands, though 1108 all this and much more was assumed. **1091** *tacitus requiras*: Ov. her. III 12 *Quaerebant taciti*; Hor. sat. I 9 12 *aiebam tacitus*; epist. II 2 145 *mecum loquor haec tacitusque recordor*: *tacitus*=tecum. **1095** *Fulgĕre*: see n. to II 41 *Fervĕre.* **1096** *Et tamen*: see n. to I 1050, and to V 1177. **1097** *Aestuat* of the swaying movement of a tree in the wind is natural enough; not unlike

Catull. 25 12 *Et insolenter aestues velut minuta magno Deprensa navis in mari*, or Cic. Verr. II 74 *aestuabat dubitatione, versabat se in utramque partem non solum mente, verum etiam corpore*: the sense of 'grows hot' seems not so suitable here, as that is an after result.

1105—1135: every day men of genius invented improved methods of life: cities were built, lands and cattle allotted at first according to merit; but soon the discovery of gold gave all power to the wealthy: men would not learn how little was needed for happiness; they therefore sacrificed everything for power and eminence, often when they had reached the summit, only to be again dashed down: let men thus struggle on along the path of ambition, since they have no true enjoyment, being really the slaves of their own dependents. **1107** *corde*: *cor habere* is a common phrase; see Forc. **1111** *facie*=1116 *pulchro corpore*, and means personal appearance, εἶδος, generally. [**1112** comp. Enn. ann. 481 *viresque valentes.*] **1118** foll. as Epicurus himself so often inculcates: Diog. X 144 ὁ τῆς φύσεως πλοῦτος καὶ ὥρισται καὶ εὐπόριστός ἐστιν, ὁ δὲ τῶν κενῶν δοξῶν εἰς ἄπειρον ἐκπίπτει: 130 τὸ μὲν φυσικὸν πᾶν εὐπόριστόν ἐστι, τὸ δὲ κενὸν δυσπόριστον: with whom the epicurean agrees in Cic. de fin. I 46 *natura divitias quibus contenta sit et parabilis et terminatas habet* cet. **1119** *penuria parvi*: so Democr. Mullach p. 170 26 πενίη, πλοῦτος, ὀνόματα ἐνδείης καὶ κόρου· οὔτε ὢν πλούσιος ὁ ἐνδέων, οὔτε πένης ὁ μὴ ἐνδέων. *penuria* is written with *e* by Augustus too in his res gestae. **1120** *claros vol. se*: a constr. not uncommon in Cicero: see Madv. de fin. II 102 and Mayor Phil. II 14: ib. 19 *cupit se audacem*: Plaut. trin. 664 *cum te maxume clarum voles.* *se atque*: for rhythm comp. IV 809 *contendere se atque parare.* *claros atque pot.*: Sall. Cat. 38 1 *ita ipsi clari potentesque fieri.* **1124** *iter viai*: see n. to II 626. **1127** *vaporant* is used here in a peculiar sense, analogous to that in which he always uses the subst. *vapor*: Livy VIII 31 7 *invidiam tamquam ignem summa petere*; XLV 35 5 *intacta invidia media sunt; ad summa ferme tendit*; Ov. rem. 369 *Summa petit livor;...Summa petunt dextra fulmina missa Iovis.*
1130 *regere imp.*: an expression found in Aen. VI 851; Livy III 15 7; VIII 23 9; Sen. Phoen. 374; Hipp. 621; Med. 216; Pliny epist. VI 16 4.
1131 *sanguine sudent*: this fine expression is used literally VI 1147 *Sudabant etiam fauces . . Sanguine*: Enn. trag. 213 *terra sudat sanguine*; Livy XXVII 4 14 *quattuor signa sanguine multo diem ac noctem sudasse*; and such a notion as this may have given occasion to Lucretius' use of the word. **1133** *sapiunt al. ex ore*: cannot therefore know the true nature of things, and must always *animi incerto errore vagari.*
1134 *ex aud.*: Plaut. Bacch. 469 *vidi, non ex audito arguo.*
1135 *Nec magis* cet.: he recalls himself from his digression into the matters of his day to the subject in hand, the early state of the world.

1136—1160: thus kings were overthrown, and anarchy followed; till nations weary of violence established laws and constitutions: then fear of punishment restrained men, as injustice generally recoils on the wrongdoer, and if he escape punishment, he cannot escape the terrors of conscience. **1136** *Ergo reg. occ.*: because they had attained supreme power, and therefore had attracted the lightning of envy and been dashed to the earth. **1138** *cap. insigne*: Livy XLV 19 10 *nomen regium et praecipuum capitis insigne gerat*; XXIV 21 7 *cum cruentam regiam vestem atque insigne capitis ostentarent*; XXVII 31 4 *populariter dempto capitis insigni*; Sen. Phoen. 40 *sanguineum gerens Insigne regni*; epist. 80 10. **1140** *metutum*: I find no other instance of this partic. though *metuendus* is so common; but so it is with *timeo horreo* and some other verbs of fearing. **1141** *Res* cet. I formerly took, as it is generally taken, to mean 'summa res' or 'summa imperii ad infimum vulgus redibat', a sense the words, as I shewed, could doubtless bear, and which would accord with the common metaphorical use of *faex*. But now I see the meaning is 'matters were falling into utter confusion and disorder': this suits best with *turbas*, the imperf. *redibat* and the whole context. *redibat*=simply *ibat*; as so often in the phrases *res ad rastros, ad restim, ad interregnum, ad gladios, ad triarios, redit*, etc.: comp. with the expression Petron. sat. 78 *ibat res ad summam nauseam*; and with the sense what Priscian quotes from Sulla's rerum suarum XXI *ad summam perniciem rempublicam perventurum* (sic) *esse*. *faecem*: Varro sat. men. 452 Buech. *hunc vocasset e liquida vita in curiae vestrae faecem*; Sen. epist. 75 18. **1142** *summatum*: I find no other instance of this word. **1143** *partim* i. e. *ex iis hominibus partim* or *aliqui docuere*: a use common in the best writers; 1083 *Et partim mutant*; 1310 *partim prae se misere leones*; III 78 *Intereunt partim*; VI 1172 *partim...Membra dabant*; 1208 *partim...Vivebant*; 1211 *perdebant...partim*: see Neue I p. 205 for its use in other writers. **1144** *Iura, legibus*, **1147** *leges artaque iura*: in the former case these words are probably synonymes; in the latter tautological; though of course *ius* has a wider meaning than *lex* and includes all which is or ought to be legally right: Horace too when he wrote *Qui consulta patrum, qui leges iuraque servat*, had probably no accurate distinction in his mind between the last two words, as *iura* comprises strictly speaking *consulta, leges* and many other things besides; and so Juv. II 72 *te leges ac iura ferentem*. [For *arta* comp. Hor. ars 423 *artis Litibus implicitum*; Pliny XVI 12 *additae leges artae*.] **1145** and **1150** *colere aevom*: so Plautus and Terence *vitam colere* for *vivere*. **1152** *quemque* i.e. every one who perpetrates the *vis* and *iniuria*. **1153** prob. alludes to the well-known verses of Hesiod Οἷ αὐτῷ κακὰ τεύχει κ.τ.λ., so often imitated. [**1154** *placid. ac pac. deg. vitam*: comp. Lucil. XIV 8 *Quin potius vitam degas sedatu' quietam?*] **1156** there is probably some sarcasm in the *divom*; though it may be a mere conventional form of speech, and said with reference to the offender's thoughts. **1157** *id fore clam*: Plaut. trucul. IV 3 21 *clam quae speravi fore*; Ter. hec. 261, 568 and 577 *clam me est*; adel. 71 *Si sperat fore clam*; Livy V 36 6 *nec id clam esse potuit*; Fronto ad amic. I 15 *quod clam ceteris esse velim*: see n. to II 568 *palam est*: one might take the last words of Cicero quoted below for a conscious paraphrase of this verse of Lucr. Here again we may notice, as was observed at 1020, that Lucr. softens and tones down what Epicurus himself expresses in all its naked harshness, Diog. X 151 ἡ ἀδικία οὐ καθ' ἑαυτὴν κακόν, ἀλλ' ἐν τῷ κατὰ τὴν ὑποψίαν φόβῳ εἰ μὴ λήσει τοὺς ὑπὲρ τῶν τοιούτων ἐφεστηκότας κολαστάς. οὐκ ἔστι τὸν λάθρα τι ποιοῦντα ὧν συνέθεντο πρὸς ἀλλήλους εἰς τὸ μὴ βλάπτειν μηδὲ βλάπτεσθαι, πιστεύειν ὅτι λήσει, κἂν μυριάκις ἐπὶ τοῦ παρόντος λανθάνῃ· μέχρι γὰρ καταστροφῆς ἄδηλον εἰ καὶ λήσει: Sen. epist. 97 makes much of this theme, *eleganter itaque ab Epicuro dictum puto* potest nocenti contingere ut lateat, latendi fides non potest...*tuta scelera esse possunt, secura non possunt*, and more to the same purpose: *timere semper et expavescere et securitati diffidere*: and so the epicurean in Cic. de fin. I 50 *quamvis occulte fecerit, numquam tamen id confidet fore semper occultum* cet. **1159** *protraxe*: see n. to I 233 *consumpse*, and comp. III 650 *abstraxe*.

1161—1193: men believed in and worshipped gods, because they saw with their waking minds and still more in sleep shapes of preter-human size and beauty and strength: as these shapes were ever present and as their might appeared so great, they deemed them to be immortal; and to be blessed, because they could do such deeds and had no fear of death: they saw too the seasons change, and all the wonders of the heaven; they therefore placed their gods in heaven and believed all things to be governed by their providence. **1163** *sācra*, **1164** *săcra*: see n. to IV 1259 *lĭquidis et līquida*. **1169** *divom* cet.: something has been said already of the gods of Epicurus, 146 foll. and II 646 foll., and many passages quoted: Sextus adv. math. IX 25 exactly agrees with Lucr., Ἐπίκουρος δὲ ἐκ τῶν κατὰ τοὺς ὕπνους φαντασιῶν οἴεται τοὺς ἀνθρώπους ἔννοιαν ἐσπακέναι θεοῦ. μεγάλων γὰρ εἰδώλων, φησί, καὶ ἀνθρωπομόρφων κατὰ τοὺς ὕπνους προσπιπτόντων ὑπέλαβον καὶ ταῖς ἀληθείαις ὑπάρχειν τινὰς τοιούτους θεοὺς ἀνθρωπομόρφους. **1170** *animo vigilante*, **1171** *in somnis*: Velleius in Cic. de nat. deor. I 46 *a natura habemus omnes omnium gentium speciem nullam aliam nisi humanam deorum. quae enim alia forma occurrit umquam aut vigilanti cuiquam aut dormienti?* all this part of Cicero will illustrate Lucr. who means to say that all these sensible impressions of the form size and beauty of the gods are true, even that of their immortality: it is only the mental inferences added to these impressions which are false, that of their power and providence. **1177** *Et tamen*: comp. 1125 and n. to I 1050; and V 768 *Et tamen ipsa* cet.; 1096 *Et ramosa tamen* cet.; 'putting all the

previous considerations aside, this that': Cic. Cato 16 supplies a good instance of this force, *notum enim vobis carmen est: et tamen ipsius Appii extat oratio*, i.e. and even if the verses of Ennius were not known to you, yet Appius' own speech is extant to inform you: I am astonished that Halm says to *et tamen* of all mss. 'malim *etiam*': ad Att. IX 10 3 *et tamen spes quaedam*; X 6 1 *meas cogitationes omnes explicavi tibi superioribus litteris; quocirca hae sunt breves; et tamen quia festinabam* cet.: the latest editor Boot says 'pro inepto *et tamen* recepi Malaspinae *etiam*': VIII 12 A 2 (Pompey's) *ex quibus tamen* cet.; X 8 6 *et tamen* cet.; XI 3 1; XIV 5 2 *vides tamen*; XIII 42 1 *aes, inquit, alienum, et tamen ne viaticum quidem*; de fin. II 84 *Et tamen*: see Madvig: Livy XXXIX 36 12 *quorum tamen maxima pars nihil pertinet ad nos*; Ov. fasti III 573; IV 699; her. 14 62; Plin. epist. VIII 3 2; 21 4: Sen. Troad. 534 gives the full phrase, *Et, si taceret augur haec Calchas, tamen Dicebat Hector.* [Comp. also Cic. epist. I 9 10 *haec cum ad me frater pertulisset et cum tamen Pompeius ad me cum mandatis Vibullium misisset*; Dolabella ap. Cic. epist. IX 9 3 *et meas tamen preces* cet.; X 1 3 *et, praeterquam quod rei publicae consulere debemus, tamen* (*etiam* Wesenb.) *tuae dignitati ita favemus*; Plaut. Stich. 730 *mecum ubi est, tecum est tamen, Tecum ubi autem est, mecum ea itidem est*: where *tamen* exactly = itidem.] **1178** *Non tem. ulla*: VI 1219 *Nec tamen omnino temere . . ulla* cet.: the expression is common: Livy II 61 4; Suet. Aug. 16 and 53; Cal. 36; Florus I 33 (II 18); Hor. sat. II 2 116 *Non temere . . Quicquam*; [Caes. b. Gall. IV 20 3 *neque enim temere . . illo adit quisquam*; Nepos Attic. 20 2 *nullus dies temere intercessit, quo non* cet.] *convinci*: he has often used *vinco* for *convinco*; here he uses *convinci* for *vinci*; and I can find no second instance. *putabant*, 1179 *putabant*, 1181 *videbant*, 1176 *manebat*, 1170 *videbant*: this monotony of terminations is common in the older poets who were more careless on such points than the later. **1180** *mortis timor* which Lucr. and Epicurus so often insist on as the main cause of man's misery. *vexaret*: the subj. of course expresses their thought. **1182** *cap. lab.* occurs in Ter. Andr. 719; 870; hec. 344; Plaut. trin. 271. **1183** *caeli rationes* cet.: Sextus l. l. *ἔνιοι δὲ ἐπὶ τὴν ἀπαράβατον καὶ εὔτακτον τῶν οὐρανίων κίνησιν παραγινόμενοι φασὶ τὴν ἀρχὴν ταῖς τῶν θεῶν ἐπινοίαις ἀπὸ ταύτης γεγονέναι πρῶτον.* **1187** *tradere, facere* = accus. subst.: see n. to I 418. **1188** *deum templa* seems here to have much the same force as 948 *silvestria templa Nympharum.* **1189** *nox et luna, Luna dies et nox et noctis signa*: Lach. to support his weak alteration says 'si poeta in utroque *ἐπανάληψιν* voluisset, debebat scribere *nox et luna, Nox et luna, dies*; quibus non poterat subici...*et noctis signa*'; but it was partly perhaps in order that he might add *et noctis* that he has made this variation; and though Lach. says 'debebat scribere', the poet thought differently, supported as he was by the great exemplar of poets, who

says Il. B 837 Τῶν αὖθ' Ὑρτακίδης ἦρχ' Ἄσιος, ὄρχαμος ἀνδρῶν, Ἄσιος Ὑρτακίδης ὃν, 870 Τῶν μὲν ἄρ' Ἀμφίμαχος καὶ Νάστης ἡγησάσθην, Νάστης Ἀμφίμαχός τε, Νομίονος ἀγλαὰ τέκνα: comp. too Ter. Ph. 352 353; Catull. 34 1—4; 42 11 and 19; 58 1 and 2; 66 75 and 76; Ov. met. VI 299 and 300; [III 206 207 and 208; V 129; XII 172;] her. 8 80; 9 7; 12 59 and 60; Cic. 2 in Catil. 25; Pliny epist. VIII 6 5: Lucr. himself 1327 *Tela infracta suo tinguentes sanguine saevi, In se fracta suo tinguentes sanguine tela*; and Catullus there quoted. Nay it is to be noted that the oldest extant Latin writer on rhetoric explains *conduplicatio*, as he translates *ἐπανάληψις*, to be *eiusdem unius aut plurium verborum iteratio, hoc modo* tumultus Gracchi, Gracchi tumultus domesticos et intestinos comparant. *item* commotus non es, cum tibi pedes mater amplexaretur, non es commotus. *item* nunc audes etiam venire in horum conspectum, proditor patriae, proditor inquam patriae, venire audes in horum conspectum. **1190** comp. Aen. VII 138 *tum noctem noctisque orientia signa.* *severa*: IV 460 *severa silentia noctis.* **1191** *Noctivagae* cet.: II 206 *Nocturnasque faces caeli sublime volantis* cet.; see n. there: *noctivagus* is found in Aen. X 216, which Macrob. sat. VI 5 12 compares with Egnatius de rerum natura I *noctivagis astris* cet. **1193** *murmura minarum* seems like in principle to 369 *cladem pericli*; see n. there: Sextus l. l. 24: *ὁρῶντες γάρ, φησί* [*Δημόκριτος*], *τὰ ἐν τοῖς μετεώροις παθήματα οἱ παλαιοὶ τῶν ἀνθρώπων, καθάπερ βροντὰς καὶ ἀστραπὰς κεραυνούς τε καὶ ἄστρων συνόδους ἡλίου τε καὶ σελήνης ἐκλείψεις ἐδειματοῦντο, θεοὺς οἰόμενοι τούτων αἰτίους εἶναι.*

1194—1240: what misery men brought on themselves by assigning to the gods such powers and passions! the ceremonies of superstition shew not genuine piety which consists rather in despising such things: true when we look up to heaven and think of its beginning and end, this fear of the gods is apt to seize on us: nay who does not dread the thunder, lest it be a presage of divine vengeance? think too of generals and armies whelmed in the sea; of all men's glories dashed down to the dust by some hidden power: no wonder that men abase themselves before the gods. **1194** *O genus* cet.: the form of expression recalls Emped. 14 *Ὢ πόποι, ὢ δειλὸν θνητῶν γένος, ὢ δυσάνολβον, Οἵων ἐξ ἐρίδων ἔκ τε στοναχῶν ἐγένεσθε.* **1195** *iras* cet.: *neque tangitur ira* was an essential of the divine nature according to Epicurus and Lucr. **1197** *Volnera*: III 63 *haec vulnera vitae*; Cic. de off. III 85 *hunc tu quas conscientiae labes in animo censes habuisse, quae vulnera?* **1198** *velatum* refers to the Roman custom of praying *velato* or *operto capite*, the Greek custom being *aperto capite*: Dionysius and Plutarch as Greeks both dwell on this to them curious fashion: it was traditionally traced back to Aeneas by them and others as well as by Virg. Aen. III 405 *Purpureo velare comas adopertus amictu*: [comp. Ovid fasti III 363 (of Numa) *caput*

niveo velatus amictu.] **1199** *Vertier* refers to another habit of Roman worship: the suppliant approached in such a way as to have the statue of the god on his right and then after praying wheeled to the right so as to front it, and then prostrated himself: *προσκυνεῖν περιφερομένους*: Suet. Vitell. 2 *capite velato circumvertensque se, deinde procumbens*; Plaut. curc. 69 *quo me vertam nescio.* PA. *Si deos salutas, dextrovorsum censeo*; Val. Flaccus VIII 243 *sacrificas cum coniuge venit ad aras Aesonides, unaque adeunt pariterque precari Incipiunt...dextrum pariter vertuntur in orbem*: *vertuntur* being reflexive, as *Vertier* here, and IV 295 *convertitur*, 317 *convertier.* Livy has *convertentem se*; Pliny *corpus circumagere.* *ad lapidem* would seem to be most simply taken as said contemptuously of the statue. But since we find *lapis, sacer lapis, lapis unctus, unguine delibutus, coronatus* and the like, said especially of the *termini* which were solemnly worshipped, but also of stones set up in the streets and roads, etc. occurring so often in all periods, Lucr. may refer to them: comp. Tib. I 1 11; Prop. I 4 24; Ov. fasti II 641; Sen. Hipp. 528; Apul. flor. 1; Sic. Flaccus p. 141 l. 4 Lach.; Prud. c. Symm. II 1006; Arnob. I 39; August. civ. dei XVI 38: and, in Greek, Luc. Alex. 30 *καὶ εἰ μόνον ἀληλιμμένον που λίθον ἢ ἐστεφανωμένον θεάσαιτο, προσπίπτων ἀεὶ καὶ προσκυνῶν*: Clem. strom. VII p. 713 *πάντα λίθον, τὸ δὴ λεγόμενον, προσκυνοῦντες.* These *lapides* were generally mere stones; but Min. Fel. 3 has *lapides, effigiatos sane et unctos et coronatos*, referring to a *simulacrum Serapidis* in the open air; which again would leave the meaning of Lucr. uncertain. **1200** *procumbere*: see Suet. l. l. *pandere palmas*: Aen. III 263 *passis de litore palmis Numina magna vocat*: so *tendere palmas, manus duplices*, etc. etc.

1202 *vota* are here the *votivae tabulae* or *tabellae*, hung up on the wall of a temple or elsewhere, Aen. XII 766 on an *oleaster*; Ov. met. VIII 744 on a *quercus*: *vittae mediam memoresque tabellae Sertaque cingebant, voti argumenta potentis*: comp. too Apul. met. VI 3 and 29; in fulfilment of a vow on recovery from sickness or for escape from some disaster, especially shipwreck: Tib. I 3 27; Cic. de nat. III 89; and so Virgil Horace Juvenal Persius and others; but vows were also thus offered prospectively, before the danger was past: Prop. V (IV) 3 17; Juv. XII 98. Lucretius' vague words may refer to either practice or to both. *vot. nect. vota*: Prop. IV (III) 5 12 *armis nectimus arma nova*; Apul. met. VIII 7 *variis exemplis multivagi casus solacia nectere.* **1203** *pacata*: 1154 *pacatam degere vitam.*

1204 *Nam*: it is true piety, not to perform these ceremonies, but to have a mind at ease; *for* it requires great strength of mind and a knowledge of the true being of the gods, not to be overpowered by the grandeur and terror of nature. **1205** *fixum* only means fast in its place and abiding, for he grants it to be probable that the sphere of ether and the stars revolve: Ovid met. II 204 *altoque sub aethere fixis Incursant stellis*, was thinking doubtless of Lucr.; Lucr. as we have seen supposes the stars to be above the sun and moon; probably therefore in the lower part of ether. With this and all that follows comp. Democritus quoted at 1193. **1207** *in pectora caput erigere* i.e. assurgere et invadere pectora. **1208** *caput*: I 64 *Quae caput a caeli regionibus ostendebat.* **1209** *nobis*: the dat. ethicus: see n. to I 797. **1213** *finis quoad*: comp. 1433. **1214** *Sollicitis*: if this be the true reading, comp. I 343 *Non tam sollicito motu privata carerent*; VI 1038 *Sollicito motu semper iactatur.* **1215** comp. Tib. (Lygd.) III 1 21 *meritam longa donate salute.* **1216** = I 1004. **1217** = 379. **1219** *Contrahitur* is the opposite of *diffunditur*, expands with joy: Cic. de nat. II 102 *tum quasi tristitia quadam contrahit terram, tum vicissim laetificat*; [Lucil. XXIX 111 *non tu Contraheris, vel qui in nuptis vel vergine pecces,* (*nuptiis velse seneces te* mss.) *Nec sine permitie?*] *correpunt*, like a worm or other reptile drawing itself together: 'tralatio est mirabilis et audax' says Lamb. **1220** *tellus—caelum*: VI 287 *Inde tremor terras graviter pertemptat et altum Murmura percurrunt caelum.* **1222** *populi*, regular *πόλεις* of civilised Greeks Italians or Poeni: *pop. gen. reg.*: Cic. de domo 73 *summum est populi Romani populorumque et gentium omnium ac regum consilium senatus*; Livy XLV 19 1; XXIII 33 1. **1223** *Corripiunt* = contrahunt, but is stronger: VI 1161 *Corripere assidue nervos et membra*; IV 83 *correpta luce diei.* **1225** *Poenarum solvendi*, a constr. found not only in Plautus and Terence, *nominandi istorum copia*, capt. 1004 *lucis tuendi copiam, novarum spectandi copiam*; truc. II 4 19 *tui* (fem.) *videndi copia*, hecyra 37 *eius* (uxoris) *videndi*, but also in Cicero: *facultas agrorum condonandi*; *exemplorum eligendi potestas*; *reiciundi trium iudicum potestatem*; *earum rerum neque infitiandi rationem neque defendendi facultatem*: it is curious that in all these instances the subst. governing the gerund is the same or has the same meaning: de fin. V 19 *eorum adipiscendi causa.* [Comp. Fronto ad amicos I 24 *tantus usus studiorum bonarumque artium communicandi*: see Klusmann emend. Fronton. p. 31: see too Roby gramm. pt. II. p. lxviii.] **1227** *Induperatorem...Cum leg.*: Enn. ann. 552 *Cum legionibus quom proficiscitur induperator.* **1229** *divom pacem*, grace, favour, pardon of the gods, is copiously illustrated by Forc. from Virgil and others: *deum pacem exposcere, inventa pace deum* and the like are common in Livy: XLII 2 3 *pacemque deum peti precationibus*: I find two instances of *pax* thus used in inscr. Lat. I. *adit*: Cicero has *deos, aras adire*; Apul. met. VI 3 *adire cuiuscumque dei veniam.* *quaesit*: this old form, always retained in the familiar *quaeso* and in *quaesivi quaesitus*, is found in Ennius several times and in Plautus; Cic. Arat. 18 *si quaesere perges*: Sallust has *quaesere, quaesit* and *quaesitur.* **1230** must certainly be retained; for repetitions like *pacem, paces* are very common in Lucr. and the older writers: Hor. epist. II 1 102

Hoc paces habuere bonae ventique secundi looks like a reminiscence of Lucr.: the plur. *paces* is common enough. *animas*: see n. to I 715. **1231** *saepe* appears to be idiomatical, as in Aen. I 148, where see Conington: Lucr. does not mean to say 'in vain, since he *often* perishes none the less'; but what he means is this 'since *in every case* a man perishes none the less for all his prayers, as we see by many examples'; *saepe* therefore means *id quod saepe fieri videmus*: though less marked, it has essentially the same force in such passages as II 85 and IV 34, where *cum saepe* means *cum, ut saepe fit*: III 912 *ubi discubuere tenentque Pocula saepe homines* i.e. ut saepe fit. *turbine corr.*: VI 395 *Turbine caelesti subito correptus*; Aen. I 45 *Turbine corripuit.* **1232** *vada* seems to be used at once in a literal and metaphorical sense: comp. 1289 *belli Miscebant fluctus.* **1233** *vis abdita quaedam*, the secret power and working of nature; the effect of which in particular cases no man can foretell, however unvarying and inexorable her laws: VI 29 *Quidve mali foret in rebus mortalibu' passim, Quod fieret naturali varieque volaret Seu casu seu vi, quod sic natura parasset.* Bayle art. Lucrèce n. F accuses Lucr. of gross inconsistency in speaking of this *vis abdita quaedam*, when at the same time he attributes all things to the necessary movement of atoms, 'cause qui ne sait où elle va ni ce qu'elle fait'; but this very 'cause' is the *vis abdita quaedam*: it is true that as far as form and expression are concerned there is a struggle between the poet's imagination and the philosopher's creed. Lucretius is here speaking of course generally; but it is not unlikely that his fancy may have been caught by reading of some striking disaster of this kind, such as that of M. Claudius Marcellus who perished in this way just before the third Punic war, as he was going on an embassy to Masinissa: *M. Marcellus, qui ter consul fuit, summa virtute pietate gloria militari, periit in mari*, says Cicero in Pison. 44; he several times refers to his fate by which he was greatly impressed: Livy epit. L *Claudius Marcellus coorta tempestate fluctibus obrutus est.* **1234** *fascis* cet.: see n. to III 996. **1237** *dubiaeque*: comp. 985 *validique leonis*; IV 518 *ruere ut quaedam videantur velle ruantque*; and n. to II 825 *uno varioque colore.* [**1238** *se temnunt*: Lucil. XI 13 *Non contemnere se et reges odisse superbos.*] **1239** *relinqunt*: Madvig at end of Henrichsen de frag. Gottorp. 'non quaeritur quid relinquant, nihil enim tollunt, sed quid necessarium putent et propterea excogitent. scrib. *requirunt*': but *relinqunt* here means, to admit, hold, believe, a sense it has again and again in Lucr. with or without an infin.: I 742 *motus exempto rebus inani Constituunt et res mollis rarasque relinquont*: [and see n. to I 515 and 703; III 40.]

1241—1280: the metals were discovered through the burning of woods which baked the earth and caused the ore to run; with these they made arms and tools: copper at first was rated more highly than useless gold and silver; now it is the contrary; thus things in turn

flourish and decay. **1242** *plumb. pot.*: so *venti, animae, animi, corporis potestas* and the like: a favourite periphrasis, with the same force as *vis.* **1243** foll.: 'comp. Arist. mir. ausc. 87' H. Nettleship. **1246** *form. ergo*: III 78 *statuarum et nominis ergo*; Livy XXII 38 4 *fugae atque formidinis ergo.* **1248** *pandere* must mean, to open up and clear of trees. *pascua* is the adj. **1251** *saepire...ciere*: Virg. ecl. X 57 and geor. I 140 *canibus circumdare saltus.* **1256** *argenti* cet.: Virg. geor. II 165 *argenti rivos aerisque metalla Ostendit venis atque auro plurima fluxit*: Milton too par. lost XI 565 has imitated all this passage, *two massy clods of iron and brass Had melted, whether found where casual fire Had wasted woods on mountain or in vale Down to the veins of earth; thence gliding hot To some cave's mouth* etc. **1262** *penetr. eos* i.e. penetrabat in animos eorum: I do not find an exactly similar instance, but Wak. quotes Tac. ann. III 4 *nihil tamen Tiberium magis penetravit quam* cet. **1266** *darent* i.e. hae res, *possent* i.e. ipsi. **1268** *terebrare, pertundere, perforare*: I do not know if Lucr. meant accurately to distinguish these words, or whether he uses them tautologically more or less. *terebra* appears to mean gimlet and auger and drill; and I find *terebra pertundere*, and *terebra perforare* in good authors: perhaps *terebrare* is to bore with a gimlet, the oldest sense of *terebra*; *pertundere* to pierce with a punch; *perforare* to bore with auger or drill. **1270** *violentis*, applied to copper is poetical. **1275** *in sum. succ. hon.*: 1123 *ad summum succedere honorem.* **1276** *volvenda*: see n. to 514 *volvenda sidera.* *tempora rerum* is much the same as *statum rerum*: Wak. compares Aen. VII 37 *quae tempora rerum, Quis Latio antiquo fuerit status*: comp. too Cic. ad fam. II 18 3 *tempora autem reipublicae qualia futura sint, quis scit?* **1276** foll.: comp. 831 *Omnia commutat natura et vertere cogit. Namque aliut putrescit et aevo debile languet, Porro aliut clarescit et e contemptibus exit.*

1281—1307: for arms men used at first hands nails teeth clubs, then fire, then copper or brass, at last iron; horses next, then chariots, then elephants were employed in war, strife begetting one horror after another. **1283** *Arma* cet.: Hor. sat. I 3 101 *Unguibus et pugnis, dein fustibus, atque ita porro Pugnabant armis.* **1289** *Aere* cet.: doubtless, as Lamb. says, he was thinking of Hesiod works and days 150 Τοῖς δ' ἦν χάλκεα μὲν τεύχεα, χάλκεοι δέ τε οἶκοι, χαλκῷ δ' εἰργάζοντο· μέλας δ' οὐκ ἔσκε σίδηρος. **1290** *Miscebant*: there is perhaps in this word a blending of the notions of *miscere fluctus* and *miscere proelia.* *fluctus*: we have the same metaphor in 1435 *belli magnos commovit funditus aestus.* *vasta* seems to unite the ideas of huge and ugly, misshapen. *serebant*: it is not clear to me from which of the two verbs this comes: it may mean 'scattered broadcast', a stronger term than *spargebant*: comp. *lumine conserit arva*; or, as Livy and others have *levia certamina serens, certamina serebant*, etc. with the force of *conserere*, Lucr. may extend

this meaning to *serere vulnera*, they joined, applied or the like: but *sermones, colloquia, circulos, haec sermonibus, Haec inter sese vario sermone serebant*, seem equally ambiguous: Livy XXI 6 1 writes *certamina cum finitimis serebantur, maxime Turdetanis. quibus cum adesset idem qui litis erat sator*: such apposition could scarce fail to confuse in a Latin's mind the two meanings of *serebantur*. Fronto ad Verum 8 has *quam libenter consevisti sermonem*. **1294** *Versaque* cet. may refer, as Bentl. says, to its use in magical and unlawful rites: Aen. IV 513 *Falcibus et messae ad lunam quaeruntur aenis Pubentes herbae*; Ovid met. VII 227 *Partim succidit curvamine falcis aenae*; her. VI 84 *Diraque cantata pabula falce metit*: Macr. sat. V 19 9 compares Virg. l. l. with Soph. ῥιζοτόμοι: γυμνὴ χαλκέοις ἦμα δρεπάνοις: [see ibid. χαλκέοισι κάδοις δέχεται:] this would explain the curious variant *obscenum*. But Lucr. may merely mean 'went out of fashion', 'fell into disgrace'. **1296** *Exaequata*, by the equality of weapons. **1297** *conscendere* and the following infinitives as 1250 *venarier*, are all used as substantives: see n. to I 331. **1298** *dex. vig.*: while guiding the horse with the left, to have the free use of the right. [**1301** *escend. currus*: Livy XXIII 14 2 *equum escendere*; the older writers generally have *esc. in* cet.] **1302** *boves lucas*, 1339 *boves lucae*: Pliny nat. hist. VIII 16 *elephantos Italia primum vidit Pyrri regis bello et boves lucas appellavit in Lucania visos anno urbis* 472: Varro de ling. Lat. VII 39, in trying to controvert, really confirms this tradition: the expression is found in Naevius, Sen. Hippol., Silius and others, [and appears now to be the true reading in Plautus Casin. 704. Pausanias IX 21 2 calls the rhinoceros *bos aethiops* (Friedl. Sitteng. II p. 530); and X 13 2 the bison 'Paeonian bull' (ib. p. 532).] *turrito*, thus applied in prose: see Forc. *taetras*: Isid. orig. X 270 '*tetrum* enim veteres pro *fero*, ut Ennius *tetrosque elephantos*'. **1303** *Anguimanus*: see n. to II 537.

1308—1349: bulls boars and lions too were tried in war; but they often turned upon their owners, as elephants are sometimes seen to do now: probably they were employed by the weaker side only in despair. **1310** *partim*: see n. to 1143. **1313** = II 632, except *undique* for *numine*. *undique* refers to *nullo discrimine* of 1312. *capitum cristas*: partly for defence perhaps, partly to strike terror: comp. Livy XXXVII 40 4, of Antiochus' Indian elephants, *ingentes ipsi erant: addebant speciem frontalia et cristae et tergo impositae turres* cet.; [bell. Afr. 86 2 *elephantosque* LX *ornatos armatosque cum turribus ornamentisque captos ante oppidum instructos constituit*.] They were given to men for the same purpose: Livy IX 40 3 *galeae cristatae, quae speciem magnitudini corporum adderent*; X 38 12 *his arma insignia data et cristatae galeae ut inter ceteros eminerent*; 39 12 *non enim cristas vulnera facere*. **1318** *iac. cor. sal.*: Aen. II 565 *corpora saltu Ad terram misere*. **1321** *deplexae* appears not to occur elsewhere, but expresses very vividly the

action in question, 'de eis pendentes eisque implicatae' Turneb. adv. XXX 22. **1324** *lat. ac v. haur.*: 991 *dentibus haustus*: this use of the verb, found in Virgil and often in Ovid, we meet with in prose as early as Claud. Quadr. ap. Gell. IX 13 17 *Hispanico pectus hausit*: Livy VII 10 10, Tacitus and Curtius also have it. **1325** *min. fr.*: Ov. amor. III 13 15 *vituli nondum metuenda fronte minaces*. **1327 1328** an ἐπανάληψις; as in Catull. 62 21 *Qui natam possis complexu avellere matris, Complexu matris retinentem avellere natam*: *In se fracta* then defines more precisely *infracta* of 1327, 'broken off, yes broken off in their own body': see n. to 1189. **1327** *Tela infr.*: Aen. X 731 *infractaque tela cruentat*. **1330** *exibant adactus*: VI 1205 *Profluvium porro qui... Exierat*; 1217 *ut acrem exeiret odorem*: Virgil Terence and others have the same constr.: Vitruvius uses the personal passive in the sense of passed through or over: X 9 (14) 3 *quantum diurni itineris miliariorum numero cum raeda posset exiri*; and so Paulus Fest. p. 28 '*ad exitam aetatem*, ad ultimam aetatem'. **1332** *succisa*, the technical word for ham-strung: Livy XLIV 28 14 *nervos succiderunt in litore Macedones*. *ab nervis* = a parte nervorum, where the tendons were: Cic. in Verr. V 32 *ne denudetur a pectore*; Caes. bell. Gall. VI 28 5 *ab labris argento circumcludunt* cet.; VII 25 2 *scorpione ab latere dextro traiectus*; Q. Cic. comm. pet. 10 *sinistra capillum eius a vertice teneret*; Livy VIII 7 11 *ab iugulo . . terrae adfixit*; Caelius ap. Quintil. IV 2 124 *a cervicibus tollebant*; Suet. Tib. 68 *latus ab umeris et pectore*; Plaut. Men. 1011 *te ab umero qui tenet*. **1333** *terram const.*: Aen. XII 543 *late terram consternere tergo*. **1334** *domi domitos*, an intentional assonance: see n. to I 826 *sonitu sonanti*. [**1336** comp. Caes. b. civ. III 69 4 *omniaque erant tumultus timoris fugae plena*.] **1338** *varium genus omne*: VI 363 *Tum variae causae concurrunt fulminis omnes*. **1339** *male mactae*: some editions and lexicons refer *mactae* to *macte* without shewing what connexion in form or sense there is between the two; others make it the same as *mactatae* without any explanation: I take it for the partic. of a verb *macĕre*: Mueller Festus p. 397 seems rightly to restore a fragment of Naevius thus, *namque nullum Peius macit homonem quamde mare saevum*, and to defend *permacĕre* in Ennius: *mactae* then will be 'mauled' 'hacked about': comp. *macellum*.—Conington in an excursus on the word *macte*, Aen. IX 641, explains *male mactae* 'by a reference to such expressions as *mactare malo, infortunio*, etc. Lucr. was using a word which in his time was probably obsolescent, and he well may have wavered between a conception derived from the expressions just quoted, and one founded on the later use of *mactare* in the sense of slaughtering a victim'. I see that the latest editors of Pliny and Curtius read *macti* in the passages he refers to. **1340** *fera facta* N. P. Howard well defends by Ov. met. III 247 *velletque videre, Non etiam sentire canum fera facta suorum*: comp. too Livy epit. 92 *Q. Sertorii multa crudelia in*

suos facta continet. *dedere*, as 1329 *dabant ruinas*: see n. to IV 41. **1341** *adducor ut* for *adducor ad credendum ut*, though not from Lucr., is good Latin: comp. Cic. de fin. I 14 *illud quidem adduci vix possum ut ea quae senserit ille tibi non vera videantur*, and Madvig there who gives other instances. **1345**=528. **1348** comp. Livy IX 14 15 *perdere prius quam perire optantes.*

1350—1360: weaving came into use after iron which is needed for the instruments employed in it: men first practised it, afterwards women.—See Bluemner Gewerbe u. Kuenste I p. 121 n. 1. **1350** *Nexilis vestis* would be a garment of skins fastened on the body by tying. **1351** the web is prepared with iron, i.e. cannot be woven without instruments of iron; the next two verses explaining this. **1353** *Insilia* might be supposed to be connected with *insilio* and to answer to the treadle, pressed by the weaver's foot: but Creech pertinently remarks that *levia* is not then an appropriate epithet: and iron or steel could hardly be needed for such a purpose: Schneider in his index to the script. rei rust. thinks they are the heddles or leash-rods which open the warp, as Rich records; and this is probable enough. The word is not found elsewhere and its meaning must be guessed. *radii* seem to have performed the office both of shuttle and batten or *pecten* or κερκίς: see Rich's companion: comp. Sen. epist. 90 20 *stamen secernit arundo, Inseritur medium radiis subtemen acutis, Quod lato paviunt insecti pectine dentes.* **1359** *durum*, **1360** *in duro durarent*: 1402 *Duriter et duro*; [comp. Sen. rhet. controv. I 1 21 *durum sensum videbatur non dure posuisse.*]

1361—1378: nature first taught to sow plant and graft: then one kind of culture after another was discovered, and more and more ground brought under tillage. **1361** *specimen* cet.: 186 *ipsa dedit specimen natura creandi.* **1364** *pullorum*: Cato de re rust. 51 *ab arbore abs terra pulli qui nascentur, eos in terram deprimito*: the verb *pullulo* is more common in this sense. *examina* I do not find elsewhere thus applied; though of course the word has various metaph. applications; as may be seen in the lexicons: comp. too Aetna 373 *ventorum examina*; 503 *Emicat examen.* *suboles proles propago* are similarly transferred from plants to animals. **1367** foll. comp. Virg. geor. II 35 *proprios generatim discite cultus, Agricolae, fructusque feros mollite colendo.* **1368** *mansuescere terram*: see n. to IV 1282. **1369** *indulgendo, colendo*: men are the subject of these gerunds, *terram* of *mansuescere*: see n. to I 312 *habendo.* **1374** *Caerula*, the γλαυκᾶς φύλλον ἐλαίας. **1377** *Omnia*: 1066 *latrant et vocibus omnia complent.* **1378** *Arbustis*: see n. to I 187: Lucr. uses *arbusta* continually for *arbores*, never *arbustis* for *arboribus* which suits his v.: *arbustis* therefore has here its usual meaning, and is nowhere else found in his poem. *opsita circum* and *intersita* are of course set in contrast. Wordsworth in his scenery of the

lakes quotes 1370—1378 and says of them 'Lucretius has charmingly described a scene of this kind'. The description is likewise eminently true of Italy, and is singularly graphic and compressed.

1379—1435: birds taught men song; from the whistling of the zephyr through reeds they learnt to blow through stalks; next the pipe came into use, with which they amused themselves mid other kinds of rustic jollity: with such music watchers would while away the time, and derive no less pleasure than now is gotten from elaborate tunes: then acorns skins and beds of leaves were given up; though fought for once as eagerly as men now strive for purple and gold; lust of gain and cares came next to vex life. **1380** *levia*: Quintil. inst. II 5 9 *quae levis et quadrata, sed virilis tamen compositio*; V 12 18 he shews whence the metaphor comes, *dum levia sint ac nitida, quantum valeant, nihil interesse arbitramur*: *levitas* and λειότης are used in the same way. **1381** *Concelebrare* seems to have the sense it has in Cic. de inv. I 4 *mihi videntur postea cetera studia recta atque honesta, per otium concelebrata ab optimis, enituisse*; see also n. to I 4 *Concelebras*: the sense of often practising or resorting to a thing readily comes from its primary sense: comp. Livy IX 30 8 *per speciem celebrandarum cantu epularum*; [Lucil. XXX 7 *Multis indu locis sermonibu' concelebrarunt*; Q. Cic. de pet. 44 *est in conviviis, quae fac ut et abs te et ab amicis tuis concelebrentur et passim et tributim*; 50 *ad rumorem concelebrandum valent.*] **1383** *cicutas*: Virg. ecl. II 36 *disparibus septem compacta cicutis Fistula.* **1386** *nemora, silvas, saltus*: see n. to 41. **1387** [*loca past. des.*: comp. Virg. geor. III 476; Aen. XI 569; Wordsworth, song at the feast of Brougham Castle, 9th l. from end *The sleep that is among the lonely hills.*] *otia dia*: the meaning of *dia* here is not easy to determine; see n. to I 22 *dias in lum. oras*: does it denote that strange preternatural silence and repose, which you find for instance at the present time in passing on a fine day over the higher table-lands of Arcadia, so eminently now as always *loca pastorum deserta*? or is it *otia sub divo*, if indeed *dia* can bear that meaning? *dia* may indeed have much the same sense as *divinus* in Aen. III 442 *Divinosque lacus*; Prop. I 18 27 *divini fontes.* **1391** *Cum sat. cibi* i.e. ἐπεὶ πόσιος καὶ ἐδητύος ἐξ ἔρον ἕντο. *nam tum*, for then, and not till then, they have leisure to think of mental pleasures. **1392—1396** = II 29—33, with slight changes. **1394** *habebant*, II 31 *curant*: Plaut. capt. 314 *Is, uti tu me hic habueris, proinde illum illi curaverit.* **1398** Virg. ecl. VI 8 *Agrestem... musam.* **1399** *plexis* cet.: Catull. 64 283 *Hos* (i.e. flores) *indistinctis plexos tulit ipse corollis*, with another constr.: comp. the various ways in which *circumdatus* and so many similar words are used in Latin. **1401** *extra numerum*, the opposite of *in numerum*, is found in Cicero: parad. III 26 *histrio si paulum se movit extra numerum*: see n. to II 631 and 636 *in numerum*: orator 195 *extra numerum* has another sense. **1402** *Duriter*: Ov. fasti III 537

duras..choreas. *terram* cet.: Hor. od. III 18 15 *Gaudet invisam pepulisse fossor Ter pede terram.* **1405** *vigilantibus*, whether because they could not go to sleep or because they were obliged to watch. *solacia somni*: Lach. well compares Aeschylus' ὕπνου ἀντίμολπον ἄκος: but as *somnus* here=*somnus negatus* anyhow, I am not sure that the *somno* of mss. will not stand; but the judgment of Lamb. and Lach. on such a point when they agree is very weighty. [But for *somno* comp. Livy XXV 16 20 *eum decus eximium, egregium solacium suae morti inventurum*: see Draeger hist. synt. I p. 406 on this passage.] **1406** *Ducere, flectere* appear to be technical terms: culex 5 *ducam voces*; Aen. IV 463 *longas in fletum ducere voces*; Ov. amores II 4 25 *Haec quia dulce canit flectitque facillima vocem*; Pliny XVI 171 speaking of *tibiae* says *apertioribus earum lingulis ad flectendos sonos*: Tib. I 7 37 *voces inflectere cantu.* **1407** comp. IV 588 *Unco saepe labro calamos percurrit hiantis.* **1408** *vigiles* must be official watchmen, whether of the camp or the town. **1414** Wak. gives us the choice of two constructions: illa melior res posterior reperta perdit sensus, which he prefers; and, posterior res melior perdit illa reperta; but there is a third course open to us, posterior res melior reperta perdit illa i.e. priora; and that I doubt not is what Lucr. meant: he is sufficiently indifferent to such ambiguities; comp. 1382 *Et zephyri, cava per calamorum, sibila*; and two lines below, *illa relicta Strata cubilia sunt herbis*, and 1418 *vestis* coming between *Pellis* and *ferinae*, and IV 193 *parvola* (neut.) *causa*, and I 414 *ne tarda prius per membra senectus Serpat*: in all these cases we are left to the sense alone to guide us. **1421** *Et tamen*, and after all when they had killed the owner, they got no good from it. **1422** *convertere*: comp. IV 1130 *vertunt*, and n. to III 502 *reflexit*: Cic. Brutus 141 *hoc vitium huic uni in bonum convertebat*; pro Plancio 50 *non dubito quin omnis ad te conversura fuerit multitudo.* **1428** *auro* cet. i.e. large figures worked in with gold. **1429** *plebeia*: II 36 *in plebeia veste*: Hor. sat. I 3 14 *toga quae defendere frigus, Quamvis crassa, queat.* **1432** *hab. Finis*: culex 84 *finem transcendat habendi.* **1433** *quoad crescat*, after which it becomes excess. **1434** *provexit*, a technical expression for carrying a ship out to sea. **1435** see n. to 1290.

1436—1439: the sun and moon taught men the seasons of the year. **1436** *magnum versatile*: for the double epithet see n. to 13 and I 258. *versatile*: see n. to 505: Lach. observes '*versatile* non magis *templum* esse potest quam *locus*'; but I 1105 *Neve ruant caeli penetralia templa superne*; VI 285 *displosa repente.. templa*: if a thing can tumble down or burst in pieces, it surely can revolve. **1437** *lustrantes* cet.: comp. Cic. Arat. 237 *Quattuor aeterno lustrantes lumine mundum Orbes stelligeri* cet.

1440—1447: then came walled towns, division of lands, ships, treaties between states; and, when letters were invented, poetry.

1442 *florebat*: I 255 *laetas urbes pueris florere videmus*; Val. Flaccus I 537 *Iam pridem regio...Undat equis floretque viris*; VII 77 *armata florescant pube novales*; see also n. to IV 450. **1445** foll.: comp. 326 foll.

1448—1457: thus by degrees experience taught men all the useful and graceful arts, one advance suggesting another, till perfection was attained. **1450** *Praemia*: III 956 *Omnia perfunctus vitai praemia.* **1452** *Usus* cet.: Virg. geor. I 133 *Ut varias usus meditando extunderet artes Paulatim*; Manil. I 61 *Per varios usus artem experientia fecit, Exemplo monstrante viam.* **1453** *ped. progr.*: 533 *hautquaquamst pedetemtim progredientis.* **1454** *Protr. In med.*: Aen. II 123 *Protrahit in medios.* **1456** *et ordine* shews in what way one thing after another is to come into the light: it = the *paulatim* of 1454.

BOOK VI

1—42: Athens first gave mankind corn and laws; but better than all him who, when he saw that men had all the necessaries and refinements of life and yet were miserable, taught them true wisdom and the way to true happiness and rid them of empty cares and fears. **1** *Primae* cet.: of many similar panegyrics take Cic. pro Flacco 62 *adsunt Athenienses, unde humanitas doctrina religio fruges iura leges ortae atque in omnes terras distributae putantur*; [Aristotle in Diog. Laert. V 17 (quoted in Bernays' Phokion p. 94).] *mortalibus aegris* is found in Virgil more than once. **4** *solacia* cet.: so V 20 of Epicurus *Ex quo nunc etiam per magnas didita gentis Dulcia permulcent animos solacia vitae.* **5** *cum corde*: see n. to I 755. **7** *et*: there is no real distinction between *et* for *etiam*, and, as Lach. explains it, *et eius extincti*: it is in vain to dispute Lucretius' use of *et* for *etiam*; even the auctor ad Heren. who wrote many years before Lucr. says IV 3 *hoc igitur ipsum maximum artificium est in arte sua posse et alienis exemplis uti.* **8** *ad caelum*: κλέος οὐρανὸν ἵκει. **11** *proquam*: see n. to II 1137. **13** *excellere* seems used in the sense it has in Cato, cited by Gellius twice, *scio solere plerisque hominibus rebus secundis atque prolixis atque prosperis animum excellere* cet.: and in Livy VI 37 11 *quippe ex illa die in plebem ventura omnia, quibus patricii excellant, imperium atque honorem, gloriam belli, genus, nobilitatem*: comp. the use of *celsus* for *superbus*. [Or *excellere* may have here and Livy l. l. the same sense as in Cic. epist. XIII 12 2 *quam maxime eius excellat industria.*] **14** *Nec* cet. i.e. et tamen nemini minus esse. **15** *ingratis*: see n. to III 935 *gratis.* *animi ingratis*: Plaut. merc. 479 *tueis ingratieis*; Cas. II 5 7 *Vobis invitis atque amborum ingratiis.* *anxia corda* is the subject of *vexare*: in spite of the *animus*, or controlling reason, the *anxia corda* vexes life with its fears and cannot

help (*cogei*) giving vent to the bitterest complaints: for the contrast of *animus* and *corda* comp. Plaut. aulul. 380 *Postquam hanc rationem ventri cordique edidi, Accessit animus*. 16 *Pausa* we have had already five times. *infestis* has pretty nearly the force of *saevis*: they are complainings expressing hatred and hostility towards nature and the condition of things. 17 *Intellēgit*: the best mss. of Sallust have *intellēgit* in Iug. 6 2, and *intellegerint* in hist. I 41 23: Cat. 51 24 Jordan on good authority gives *neglegeris*; and Iug. 40 1 *neglegisset*. *vas* cet.: III 936; Hor. epist. I 2 54 *Sincerum est nisi vas, quodcumque infundis acescit*. Here again stoic and epicurean meet: Gellius XVII 19 ἄνθρωπε, ποῦ βάλλεις; σκέψαι εἰ κεκάθαρται τὸ ἀγγεῖον· ἂν γὰρ εἰς τὴν οἴησιν αὐτὰ βάλλῃς, ἀπώλετο· ἢν σαπῇ, οὖρον ἢ ὄξος γένοιτο ἢ εἴ τι τούτων χεῖρον. *nil profecto his verbis gravius, nil verius, quibus declarabat maximus philosophorum* (i.e. Epictetus) *litteras atque doctrinas philosophiae, cum in hominem falsum atque degenerem, tamquam in vas spurcum atque pollutum, influxissent, verti mutari corrumpi et, quod ipse κυνικώτερον ait, urinam fieri aut si quid est urina spurcius*. 19 *conlata foris* and *commoda* are opposed to *illius vitio corrumpier intus*: they come from without and they are too in themselves good and salutary; therefore it is the *vas ipsum* alone that is in fault, and not the things which come into it: thus the heart of man is to blame, not what nature gives to it: the copula *et* adds much to the force of the antithesis. 20 *fluxum* which means loose, falling to pieces and the like, applied to an earthen vessel can hardly have any other sense than leaky: III 1009 *laticem pertusum congerere in vas, Quod tamen expleri nulla ratione potestur*. 23 with the position of *intus* comp. V 572 *videri, Nil adeo, ut possis plus aut minus addere, vere*: on *intus* see n. to III 171: there and I 223, II 711 and IV 1091 *intus* has its proper force; though here to join *intus* with *receperat* would be the more natural collocation of the words; and even Lamb., though he suggests the punctuation which Lach. and I have adopted, adds 'aut *intus* pro *intro* accipiendum quod huic scriptori non esse inusitatum iam ante admonuimus': Ovid met. X 457 *Iamque fores aperit, iam ducitur intus*, *intus* must surely = intro; yet Quintil. I 5 50 says pointedly '*eo* tamen *intus* et *intro sum* soloecismi sunt'; and before him Lucilius IX '*Intro* nos vocat ad sese, tenet *intus* apud se'.

24 *purgavit*: V 43 *At nisi purgatumst pectus, quae proelia . . Quantae tum scindunt hominem cuppedinis acres Sollicitum curae quantique perinde timores*: Epic. Diog. X 142 says more harshly εἰ τὰ ποιητικὰ τῶν περὶ τοὺς ἀσώτους ἡδονῶν ἔλυε τοὺς φόβους τῆς διανοίας τούς τε περὶ μετεώρων καὶ θανάτου καὶ ἀλγηδόνων, ἔτι τε τὸ πέρας τῶν ἐπιθυμιῶν ἐδίδασκεν, οὐκ ἄν ποτ' εἴχομεν, ὅ τι μεμψαίμεθα αὐτοῖς πανταχόθεν εἰσπληρουμένοις τῶν ἡδονῶν κ.τ.λ.: Hor. epist. I 16 65 *qui cupiet, metuet quoque*: Seneca has many similar commonplaces. 25 *finem* within which they may be indulged; beyond which peace of mind cannot exist.

26 *bonum summum*, being in great measure the *finem cupp. atque tim.* of 25: Epic. l. l. 128 refers this ἐπὶ τὴν τοῦ σώματος ὑγίειαν καὶ τὴν τῆς ψυχῆς ἀταραξίαν, ἐπεὶ τοῦτο τοῦ μακαρίως ζῆν ἐστὶ τέλος...τὴν ἡδονὴν ἀρχὴν καὶ τέλος λέγομεν εἶναι τοῦ μακαρίως ζῆν. But, like Lucr., he goes on to explain that, when he says pleasure is the end and chief good, he does not mean such pleasure as the ignorant or malevolent allege he does, but, l. l. 131 τὸ μήτ' ἀλγεῖν κατὰ σῶμα μήτε ταράττεσθαι κατὰ ψυχήν, and 132 νήφων λογισμὸς καὶ τὰς αἰτίας ἐξερευνῶν πάσης αἱρέσεως καὶ φυγῆς καὶ τὰς δόξας ἐξελαύνων κ.τ.λ., but above all φρόνησις ἐξ ἧς αἱ λοιπαὶ πᾶσαι πεφύκασιν ἀρεταί, διδάσκουσαι ὡς οὐκ ἔστιν ἡδέως ζῆν ἄνευ τοῦ φρονίμως καὶ καλῶς καὶ δικαίως, οὐδὲ φρονίμως καὶ καλῶς καὶ δικαίως ἄνευ τοῦ ἡδέως· συμπεφύκασι γὰρ αἱ ἀρεταὶ τῷ ζῆν ἡδέως καὶ τὸ ζῆν ἡδέως τούτων ἐστὶν ἀχώριστον: when to this is added what the stoical Seneca records epist. 66 18 *Epicurus quoque ait sapientem, si in Phalaridis tauro peruratur, exclamaturum 'dulce est et ad me nil pertinet'*, we may doubt whether a stoic could go much farther. 27 *tramite parvo*, by a short and straight cross-cut, which the vulgar cannot find: II 9 *passimque videre Errare atque viam palantis quaerere vitae*; Hor. sat. II 3 48 *ubi passim Palantes error certo de tramite pellit* cet.: we have here three ablatives together: see n. to I 183. 31 *Seu casu seu vi* are two expressions for the same thing, the inexorable chance or necessity, called V 77 *natura gubernans*, 107 *fortuna gubernans*, by which all things go on; ὅλως πρόνοιαν μὴ εἶναι μηδὲ εἱμαρμένην, ἀλλὰ πάντα κατὰ αὐτοματισμὸν γίνεσθαι, says Hippol. ref. haer. I 22 of Epicurus: see n. to V 77; and 1233 *vis abdita quaedam*: the auctor ad Heren. and Cicero join *casu et natura, natura casuque*: the κατ' αὐτοματισμόν is *naturali casu*; or II 1059 *Sponte sua forte offensando semina rerum Multimodis temere incassum frustraque coacta*. *nat. par.*: l. l. *hic sit natura factus* i.e. orbis, and yet by mere chance at first. 32 *quibus e portis* cet.: an obvious military metaphor. 34 *Volvere* cet.: 74 *magnos irarum volvere fluctus*; III 298 *Nec capere irarum fluctus in pectore possunt*, where see n. 35—41 = II 55—61. 42 comp. I 418 *ut repetam coeptum pertexere dictis*, where see n.

43—95: once more I mount my chariot, to tell what remains to be told of the things which go on above us, and to dispel the causeless fears of men who believe such things to be tokens of divine wrath: the gods will indeed plague you, if you so believe; not that they will themselves do you any hurt, but the images proceeding from their holy bodies will stir up these vain fears and poison existence. I have now therefore to sing of thunder, of tempests, of other things that take place in the sky. 43 *docui* cet., V 91—415. 46 *ressolui*: see notes 1 and n. to V 773 *resolvi*: *dissolui* cannot be defended by IV 500 *dissolvere causam*, which has there a technical and quite different force; yet it is to be noted that Lucr. once, II 381, uses *exsolvere* in this sense, and he seems to be singu-

lar in so using it. [But now I find *dissolui* supported by Arnob. I 11 *hoc et illud est in mundo malum, cuius explicare, dissolvere neque originem valeas neque causam*: the *dis-* is omitted in the old editions.] *percipe porro* occurs Aen. IX 190. **47** comp. Manil. V 10 *Cum semel aethereos iussus conscendere currus Summum contigerim sua per fastigia culmen*; for he is commencing his last book: *insigni curru* is in the culex 127: [on the metaphor of a chariot for poetry as opposed to the πεζὸς λόγος, *sermo pedestris*, see Bergk Gr. Lit. Gesch. I p. 389 n. 221.] **47—49** see notes 1. **48** *ex ira ut plac.*: Aen. VI 407 *tumida ex ira tum corda residunt.* **51** comp. Cic. Tusc. disp. IV 35 *exanimatusque pendet animi.* *saepe* here too seems to mean *ut saepe fit*: see n. to V 1231. **52** *Et* (quae) *faciunt*: the nom. *quae* supplied from the *quae* of 50; just as in 45 *quaecumque in eo fiunt fierique necessest*, the accus. is supplied from the nomin.: see Madv. de fin. V 26; and comp. V 898: Aen. VI 283 is very similar, *quam sedem somnia volgo Vana tenere ferunt foliisque sub omnibus haerent*; but harsher, as the forms of the cases there differ: where they are the same, the constr. is very common. **50** foll. comp. Epic. in Diog. X 78 foll. esp. 79 τοὺς φόβους ἔχειν τοὺς ταῦτα κατιδόντας, τίνες δ' αἱ φύσεις ἀγνοοῦντας καὶ τίνες αἱ κυριώταται αἰτίαι κ.τ.λ. **53** *Depressos, premunt*: perhaps the difference of form makes this tautology less harsh; the metaphorical force too is more prominent in *depressos*, the literal in *premunt.* **58—66** are repeated word for word from V 82—90: see the remarks to those vss.; much that is there said applies here as well: 35—41 are we saw likewise a mere repetition; as are 87—89 below; and the whole paragraph has much of that disjointed character of which we there spoke, as characteristical of so many of his introductory passages; nor in stating, 83 foll., what is to be the subject of this book does he refer to one half of the questions really discussed; though a little before, 50 *Cetera quae fieri in terris caeloque* cet., he seems to promise the rest of the book, nay a good deal more than he fulfils: 56 57 and 90 91 may have been inserted by the interpolator; or they may have been marginal annotations of the author, who felt this portion of his poem to be unfinished, and thought that these vss. which come from I 153 154, might in the end adapt themselves to one of these places. **66** *rationi*: comp. II 520 *mucroni*: I find in the inscr. Lat. I the abl. *coventionid deditioni proportioni sanctioni*, also *hereditati heredi marmori nomini* and *salutei virtutei faenisicei*, as well as the more common *parti partei luuci luci sorti silici.* **69** *putare* is for an accus. subst.: see n. to I 418 *repetam pertexere* and 331. *indigna putare alienaque* is not a common construction, but Lach. illustrates it from Cic. Cato 4 *quis coegit eos falsum putare* and Aen. VIII 522; Forc. from Virgil and Terence: comp. too Cic. pro Sest. 22 *quantum ipse cum republica sensi, numquam putari*; ad Att. IX 18 1 *illa fefellerunt, facilem quod putaramus*; XIV 10 2

in quibus plus virtutis putarunt, quam experti sunt; Ov. trist. V 10 41 *in me aliquid...putant.* **70** *Delibata*, used in a sense naturally flowing from what the word has III 24, 1088, VI 621: Hav. well compares auctor ad Heren. IV 68 *ille nulla voce delibans insitam virtutem concidit tacitus.* **72** *petere inbibat*: III 996 *Qui petere a populo fasces saevasque secures Imbibit.* **73** *cum pace*: see n. to I 287 *validis cum viribus.* Martha, p. 42, comments well on the perpetual cry of Lucr. for peace! peace!: here, he says, within 10 vss., 69—78, the word occurs three times: comp. also II 647, III 24, V 1155, 1203, 1229, 1230. **74** *volvere* cet.: 34 *Volvere curarum tristis in pectore fluctus*: see note there; and Virgil and Livy cited to III 298. **75** *plac. cum pectore*: comp. 5 *tali cum corde*, and n. to I 775; though perhaps this resembles more the use of *cum* illustrated at I 287 *validis cum viribus*, being a modal abl. rather than one of quality; as 73 *cum pace.* **76** *simulacra* cet.: comp. V 1169 and explanations given there. **83** *ratio caeli speciesque* means both the internal causes and the external aspect of what takes place above our heads: comp. his oft-repeated formula *naturae species ratioque.* *tenenda* = intellegenda: see n. to II 1173 *Nec tenet*; and comp. Cic. pro Sest. 22 *etiam sermones ansas dabant, quibus reconditos eius sensus tenere possemus*, which well illustrates how the word got this meaning which exactly suits our passage. **86** *caeli div. par.* cet.: comp. Cic. de div. II 42 *quid est igitur quod observatum sit in fulgure? caelum in sedecim partis diviserunt Etrusci. facile id quidem fuit, quattuor quas nos habemus duplicare; post idem iterum facere ut ex eo dicerent, fulmen qua ex parte venisset*; 45 *caeli enim distributio quam ante dixi et certarum rerum notatio docet unde fulmen venerit, quo concesserit; quid significet autem nulla ratio docet*: Pliny II 143 is even more precise, *in sedecim partes caelum in eo respectu divisere Tusci. prima est a septentrionibus ad aequinoctialem exortum* cet. *itaque plurimum refert unde venerint fulmina et quo concesserint, optimum est* cet.: comp. too 381 foll. where these vss. are repeated. [See Mayor to Juv. XIII 62.] **87** *in utram* appears to be explained by Pliny l. l. *ex quibus* (i.e. sedecim partibus) *octo ab ortu sinistras, totidem e contrario appellavere dextras*: it will mean, whether into the half on the right or that on the left; unless it is rather into which of two disputed quarters. **88** *partim*, as 384: see n. to I 1111; inscr. Lat. I 187 *aidiles vicesma parti Apolones dederi* i.e. vicesimam partim Apollinis dedere: it is found even in Livy XXVI 46 8 *partim copiarum ad tumulum expugnandum mittit, partim ipse ad arcem ducit.* *quo pacto*, 89 *ut*; because on minute observation of all the above points hung the interpretation of what the lightning portended: to get a notion of the subtleties connected with this art read Sen. nat. quaest. II 49, 50. **89** *dominatus*: 224 *Et celeri flamma dominantur in aedibus ipsis.* **92** *praescribta*:

489 *elabsa*: contrary to what many seem to suppose, this retention

of *b* for *p* in such words is very rare in our oldest authorities; thus the inscr. Lat. I always has *scriptus*: the *b* seems to have become more common in the silver age, artificially recalled no doubt: the best mss. of Virgil however have sometimes the *b*, as geor. I 200 *sublabsa* M P and the new frag. A published by Pertz: the above remarks apply to *adque* for *atque*; see n. to II 881. *calcis*: see Forc. and Seneca and Pliny cited by him; and comp. Varro sat. men. 288 Buech. *Nemini fortuna currum a carcere intimo missum Labi inoffensum per aequor candidum ad calcem sivit.* **93** *call. musa Calliope*: Empedocles in a new frag. in Hippol. ref. haer. VII 31, which probably was at the beginning of the third and last book of his poem, has *ἄμβροτε μοῦσα...νῦν αὖτε παρίστασο, Καλλιόπεια, κ.τ.λ.* **95** *ins. laude*: Livy VII 38 3 *sequente Decio insigni cum laude donisque*; Aen. I 625 *insigni laude ferebat. cum l. c.*: Hor. sat. I 10 49 *Haerentem capiti cum multa laude coronam.*

96—120: thunder comes from the collision of clouds; the denser they are, the deeper the rumbling; sometimes the noise is like that of a sheet of canvas blown about, sometimes like the crackling of paper; sometimes the clouds graze each other sideways and occasion a dry protracted sound.—We again come to matters beyond the certain test of sense; of which therefore many explanations may be and consequently are equally true: the remarks appended to V 533 will apply here and to what follows. **99** *Nec fit enim* i.e. *nec enim*, or *neque enim fit.* **105** *Nam cadere aut* for *nam aut cadere*, an idiomatical irregularity such as all Latin and Greek writers allow themselves, and which cannot be refused to Lucr.: indeed II 393 *Aut quia* cet. is of much the same character; and V 383 *vel cum sol* is more violent; see n. there. *bruto*: Paulus Fest. p. 31 '*brutum* antiqui gravem dicebant'. **108** *aeq. mun.*: Accius 223 *Sed quid tonitru turbida torvo Concussa repente aequora caeli Sensimu' sonere.* **109** *Carbasus* cet.: comp. IV 75; and see note there. **112** *commeditatur* seems not to occur for certain anywhere else; it must mean, to get up and practise a subject, and thus represent or imitate it. **112—115**: the punctuation must be noted: in 112 *fragilis* denotes the scraping rasping noise made by tearing papyrus: in Virg. ecl. VIII 83 it denotes the crackling noise of burning laurel; in Prop. V (IV) 7 12 the rattling made by a skeleton's hands; words denoting sounds being vague in Latin: *sonitus* of course is uncertain. Then 114 115 have the appearance of a subsequent addition; for 116 seems to refer to 113: the kind of thunder resembling the noise of torn paper or canvas. As they stand, it seems you must take the constr. to be 'Aut ubi .. per auras, id quoque genus cognoscere possis'; unless it be better to refer the *Aut* to 109 'ut carbasus, aut ut suspensa vestis chartaeque volantes, ubi eas cet.' so that it would be an instance of that Lucretian idiom illustrated in n. to I 15: in 114 *que* need not be changed to *ve*: see n. to II 825. **119** *Aridus—ducitur*: the sound well represents the

sense. *Aridus*: Virg. geor. I 357 *aridus altis Montibus audiri fragor*; Homer has *αὖον ἀΰτευν* and *καρφαλέον ἄυσεν*: the *aridus sonus* seems to be the sound which is like torn paper or canvas.

121—131: sometimes the thunder makes a noise like the crack of doom, when a storm of wind eddies round within a cloud and hollows it out, until at last it explodes with a frightful crash. **123** *mundi* must = caeli, or aetheris: see n. to I 73. **124** *ven. proc.*: 293 *ventique procella.* **125** *intorsit* is more emphatic than *involvit.* **127** *spisso cava*, the greater the hollow, the denser the crust. **129** *perterricrepo*: see introd. to notes 2 p. 16 17. *scissa* i.e. nubes: Isidor. orig. XIII 8 paraphrases this passage; he too seems to have read *missa*; see Lach.: Pliny nat. hist. II 113 *posse et...spiritum nube cohibitum tonare, natura strangulante sonitum dum rixetur, edito fragore cum erumpat, ut in membrana spiritu intenta*, might also seem in favour of the ms. reading *missa*; yet Lach. must I think be right. **130** *cum . . dat*: comp. 140 and see n. to I 566: to see with what indifference the indic. and subj. are used in such cases, comp. Catull. 66 47 *Quid facient crines, cum ferro talia cedant*, with Virg. ecl. III 16 *Quid domini faciant, audent cum talia fures* and Ov. ars III 655 *Quid sapiens faciet, stultus cum munere gaudet*: Virgil being a reminiscence of Catullus, Ovid of Virgil. **131** *torvum son.*: Aen. VII 399 *torvumque repente Clamat*; Sil. XI 99 *torvum exclamat Marcellus*; Apul. flor. p. 79 *voce hominis et tuba rudore torvior* cet.: the first blunder of our archetype is *tergis* for *pergis*; comp. too 237 *tellens* for *pellens*, and I 1105 *tonetralia* for *penetralia*: *torvum* answers to *perterricr.* of 129.—Epic. himself in Diog. X 100 foll. gives a brief summary of the possible causes first of thunder, then of lightning, and then of the other heavenly phenomena, *πρηστῆρες* etc. which Lucr. discusses: the two are generally in close accordance.

132—159: thunder may likewise come from winds blowing through rough branchy clouds; or from the wind bursting the cloud by a direct onset; or waves may break in the clouds, like those on the sea; or the hot bolt may fall into a wet cloud and hiss like hot iron; or into a dry one and make it crackle like bay-leaves in the fire; again the crash of hail and ice in the clouds compressed by the wind may be the cause. **132** *Est ratio, ut*: 639 *Nunc ratio quae sit, per fauces montis ut Aetnae Expirent ignes*: a very rare constr. which Wak. calls 'pervagata dicendi formula'; not needing then illustration, as he gives none: V 715 on the other hand *Est etiam quare possit*=est etiam ut possit; and is not used as 730 *sit cur*, where *cur* has its proper force. **140** *cum haurit*: see n. to 130 and I 566 *cum constant* and II 29. **141** *evolvens*=eruens: see Seneca Lucan and Plautus in Forc. **147** *trucidet*, a bold and telling metaphor. **148** *Ut calidis* cet.: Pliny II 112 *cum vero in nubem perveniunt, vaporem dissonum gigni ut candente ferro in aquam demerso et fumidum vorticem volvi; hinc nasci procellas*: the words are very like

those of Lucretius; he just before uses *stridunt*, as Lucr. *Stridit*; but this form of the verb was always in common use: Lucil. VII 32 Muell. reads *fulgit uti caldum ec fornacibu' ferrum.* *Ut . . olim, ubi*: *ut olim* is found in Lucil. III 5 and VII 14 Muell.; Hor. sat. I 1 25: *olim, ubi* in Aen. V 125: *olim, cum* is often so used. **149** *imbrem*: see n. to I 715. **154** *Delph. l.* described by Pliny XV 127: see Cato de re rust. 8 2, and 133 2. **155** *flamma* cet.: Aen. VII 74 *flamma crepitante cremari.* **156** *geli*: see n. to V 205. **158** *confercit*: except in the partic. *confertus*, this verb is rare: for the constr. of this v. comp. n. to III 843; and Catull. 44 7 *expuli tussim, Non inmerenti quam mihi meus venter, Dum sumptuosas appeto, dedit, cenas*; 66 18 *Non, ita me divi, vera gemunt, iuerint*; Lucan I 13 *parari Hoc, quem civiles hauserunt, sanguine, dextrae.*

160—172: the flashes of lightning are struck out by the collision of clouds: the flash is seen before the clap is heard, because light travels faster than sound.—From 96 to 159 he has been speaking of the *tonitru*, the clap of thunder: he now, 160 to 218, explains the *fulgur* or flash of lightning: then 219—422 he discusses the *fulmina*, the actual strokes or bolts or fires of thunder, or whatever it is to be called: comp. Sen. nat. quaest. II 12 *tria sunt quae accidunt, fulgurationes fulmina tonitrua quae una facta serius audiuntur. fulguratio ostendit ignem, fulminatio emittit. illa, ut ita dicam, comminatio est, conatio sine ictu; ista iaculatio cum ictu*; and 16 *fulguratio est late ignis explicitus, fulmen est coactus ignis et impetu iactus*; and 21 he says the *fulguratio* would be *fulmen, si plus hausisset virium. non natura ista, sed impetu distant*; and 57 3 *fulmen est fulgur intentum.* βροντή, ἀστραπή, κεραυνός are the corresponding Greek words. **160** *Fulgit*: Sen. l. l. 56 2 *illo verbo utebantur antiqui correpto, quo nos producta una syllaba utimur; dicimus enim ut* splendēre *sic* fulgēre. *at illis ad significandam hanc e nubibus subitae lucis eruptionem mos erat correpta media syllaba uti, ut dicerent* fulgĕre. Lucretius' practice seems to bear out what he says: 160, 174, 214, 218 *fulgit*; 165 *fulgĕre*: also V 1095 *Fulgĕre, cum caeli donavit plaga vapore*, is virtually in point: but II 27, where see note, V 768 *fulget*; VI 213 *quae faciunt flammae fulgere colores*; II 800 *refulget.* I confess that on a point like this I prefer the authority of Seneca backed up by our mss. to that of Lachmann who arbitrarily changes the 2nd conj. of the mss. to the 3rd just in those cases where Seneca and common usage support the former. Epic. l. l. 101 foll. treats of ἀστραπή or lightning. **164** *tonitrum*: Sen. l. l. 56 *nos* tonitrua *pluraliter dicimus, antiqui autem* tonitrum *dixerunt aut* tonum. **166** there is a slight anacoluthon here: *visum quae moveant* for *ad visum*; so that you must supply *adveniunt* [res quae aures moveant] *quam* [ad visum] *visum quae moveant res.* Wherever the point depends on an inference from personal observation, Lucretius, as here, puts it well and clearly and

truly. Pliny I 142 *fulgetrum prius cerni quam tonitrua audiri, cum simul fiant, certum est, nec mirum, quoniam lux sonitu velocior.* **168** *arboris auctum* seems a poetical periphrasis for *arborem*; but it probably implies at the same time a large object; as II 482 *infinito corporis auctu*; V 1171 *mirando corporis auctu.* **170** *fulgorem*: Lach. quotes Cic. de div. II 82 *fulgoribus* in a translation from Homer, and Aen. VIII 524 *fulgor* for lightning; but he adds that Lucr. here and 217 uses it in its literal sense, rather than in that of lightning: the latest editor reads in Cicero's prose l. l. 43 *fulgoribus*, 44 *fulgores*, 49 *fulgoribus*; but in each case the reading seems doubtful: Ov. met. VII 619 *notam fulgore dedit tonitruque.* **171** *pariter—eodem*: Pliny l. l. expresses by *cum simul fiant* what Lucr. emphasises in a line and a half.

173—203: I explained before how the wind eddying about within a cloud would hollow it out: well the rapid motion heats this wind; and when it escapes from the cloud, it scatters about its seeds of fire: thus you first see the flash, and then hear the noise: this takes place when the clouds are piled up high one on the other; the winds within these make a great roaring and gather flame within them, as in a furnace, till at last they burst out. **176** *Fecit ut ante cavam docui*: Lamb. compares for the involved structure I 758 *quid a vero iam distet habebis*: see also VI 158 *cum confercit franguntur in artum Concreti montes*; and n. to III 843. *ante*, i.e. 124 foll. *spissescere*, a rare word found also in Celsus. **177** *Mobilitate* cet.: another acute inference drawn from personal observation. **179** *volvenda*: see n. to V 514. *liquescit*: Sen. nat. quaest. II 57 2 *sic liquescit excussa glans funda et adtritu aeris velut igne distillat*; Ovid met. XIV 825 *lata plumbea funda Missa solet medio glans intabescere caelo*; Lucan VII 513 *ut calido liquefactae pondere glandes*: Virg. Aen. IX 588 must mean the same thing by *liquefacto plumbo*; nay Arist. de caelo II 7 οἷον καὶ ἐπὶ τῶν φερομένων βελῶν· ταῦτα γὰρ αὐτὰ ἐκπυροῦται οὕτως ὥστε τήκεσθαι τὰς μολυβδίδας. [See too Bergk Roem. Schleudergeschosse p. 97.] **182** *nictantia*: the fitful force with which the seeds are driven out causes this bickering. **184** twice before we have had *oculorum lumina*, and once *oculorum lumine.* **186** *impete*: see n. to IV 416. **187** *frudi*: II 187 *frudem* B, perhaps from Lucr.; Aen. IV 675 *frude* P; ecl. IV 31 *frusdis* R: for *frudare* and *defrudare* in Terence and Plautus see Ritschl trin. 413 and parergon p. 541. **188** *lata, extructa*: on these neuters referring to *nubibus* comp. 757 *Quadripedes*, 759 *si sint mactata*: and n. to I 352 *totas*, referring to *arbusta*: on the other hand 215 *eas*, though *nubila*, not *nubes*, immediately precedes. *quid*=quantum. **189** *Contemplator enim, cum* occurred II 114. *adsimulata*, and *simulata* in same sense, always spelt in our mss. with *u*. **191** *cumul. Insuper aliis alia*: 521 *aliis aliae nubes nimbique rigantes Insuper . . feruntur*; 1283 *suos consanguineos aliena rogorum Insuper extructa . . locabant*;

Aen. IX 274 *Insuper his*; Livy XXII 2 8 *sarcinis insuper incumbebant*; auctor dirarum 170 *Purpureos flores, quos insuper accumbebat*: for *insuper* with accus. and abl. in Cato and Vitruvius see Forc.: inscr. Lat. I 577 of the year U.C. 649 has *insuper* with an accus. several times. **193** *sepultis*: Cicero has more than once *bellum sepultum*. **195** *Speluncasque*: Ennius(?) in Cic. Tusc. disp. I 37 *Per speluncas saxis structas asperis pendentibus*; Aen. I 166 *scopulis pendentibus antrum*. **197** for rhythm comp. n. to II 1059. *magno* cet., **199** *fremitus*: Aen. I 55 *Illi indignantes magno cum murmure montis Circum claustra fremunt*. **199** *fremitus*, keeping up the illustration of wild beasts. **201** *convolvunt*: comp. Sen. epist. 94 67 *turbinum more qui rapta convolvunt, sed ipsi ante volvuntur et ob hoc maiore impetu incurrunt*. **197—203** are a good example of Lucretius' powers of graphic description.

204—218: fire of a clear gold colour sometimes darts down to the earth, because the clouds have in them many atoms of fire, and draw many from the sun; when therefore they are compressed by the wind, they emit these seeds of flame without noise or disturbance. **204** *Hac etiam fit uti de causa*=hac etiam de causa fit uti: comp. 727 and n. to II 1004. **205** *liquidi ignis* compared by Macrob. with Virg. ecl. VI 33 *Et liquidi simul ignis*: 349 *liquidus quia transvolat ignis*. **206** *ipsas* opposed to the *Quin etiam solis* of 209. **211** *contrusit, Compressit, cogens* his favourite pleonastical assonance; followed by *expressa* which answers to *compressit*. **213** *fulgĕre*: see n. to 160 *Fulgit*, and II 27 *fulget*: Lach. to maintain his own consistency in regard to the conjugation of *fulgere* forces on Lucr. a monstrous inconsistency; for *fulgore* can only mean that the atoms of fire produce the colour of flame by their own brightness, though Lucr. in II took such vast pains to prove that atoms could not have colour or any other secondary quality: the atoms by their action 182 *faciunt nictantia fulgura flammae*, and 217 *faciunt fulgorem*; so here too *faciunt flammae fulgere colores*, which is the same thing. **215** *eas*: see n. to 188.

219—238: the marks left by the thunderbolts themselves prove them to be of the nature of fire: this fire consists of atoms of extreme fineness, which nothing is able to stop; they are far more powerful than those of the sun.—He now, as we observed at 160, comes to the *fulmina*, having discussed first the *tonitru* or clap, and then the *fulgur* or flash: see n. to 160, where this was fully illustrated. **220** *ictus*, like *vulnera* and cognate words, sometimes denotes the result of the stroke as well as the stroke itself: indeed if the results are lasting, as in the cases here specified, it is impossible to separate the two meanings. **221** *halantis* is best taken as the nom. plur.: notae halantes gravis auras sulpuris. *sulpuris*: Pliny XXXV 177 *fulmina et fulgura quoque sulpuris odorem habent, ac lux ipsa eorum sulpurea est*; Sen. nat. quaest. II 53 2 *quocumque decidit fulmen, ibi odorem esse sulpuris certum est, qui quia*

gravis est cet.: comp. too Isid. de rer. nat. 30 4. **224** *dominantur*: 89 and 385 *hinc dominatus ut extulerit se*. **225** *cum primis ignibus* is the same as *cum primis*. Plut. sympos. IV 665 F τὸ κεραύνιον πῦρ ἀκριβείᾳ καὶ λεπτότητι θαυμαστόν ἐστιν, αὐτόθεν περὶ τὴν γένεσιν ἐκ καθαρᾶς καὶ ἁγνῆς ἔχον οὐσίας κ.τ.λ. **228** *Transit* cet.: comp. I 489 *Transit enim fulmen caeli per saepta domorum, Clamor ut ac voces* with 354 *Inter saepta meant voces et clausa dom. Transvolitant*: it must be admitted that the words repeated from I are not fit examples of the extreme force of lightning: if they do come from the poet, it may have been an inadvertence which he would have corrected. II 384 *caelestem fulminis ignem Suptilem magis e parvis constare figuris Atque ideo transire foramina quae nequit ignis Noster hic* cet. **230** *liquidum* cet.: Sen. nat. quaest. II 31 *loculis integris conflatur argentum. manente vagina gladius ipse liquescit* cet.; and so Pliny II 137 *aurum et aes et argentum liquatur intus* cet. **231** *Curat* cet.: Pliny l. l. *fulminum ipsorum plura genera traduntur...tertium est quod clarum vocant, mirificae maxime naturae, quo dolia exhauriuntur intactis operimentis nulloque alio vestigio relicto*: 'see Dio Cass. 57 14 and Fabric. there' J.E.M. *Curat, Diffugiant* is a constr. sufficiently attested, as by Hor. od. I 38 5 *nihil adlabores Sedulus, curo*; sat. II 6 38 *Imprimat his cura*; [Lucil. XXX 46 *curate domi sint*.] **233** *Conlaxat* seems not to be found elsewhere. *rareque facit*: comp. 962 *et facit are*. *lateramina* does not elsewhere occur except in Marcianus Capella's quotation: the meaning must be guessed, but can hardly be doubtful. **236** *aetatem* thus used is common in Plautus and Terence, and occurs more than once in Lucilius: it appears to have been a conversational idiom like our 'an age': comp. too III 986 *Perpetuam aetatem*. **237** *pellens f. c.* is well illustrated by Pliny XIV 136 *Campaniae nobilissima* (i.e. vina) *exposita sub diu in cadis verberari sole luna imbre ventis aptissimum videtur*: to such a custom Lucr. seems to refer.

239—245: now to explain the origin and prodigious force of thunderbolts. **240** *discludere*: III 171 *Ossibus ac nervis disclusis intus*. **242** *monim. vir.*: Aen. VIII 311 *singula laetus Exquiritque auditque virum monimenta priorum*; 356 *Reliquias veterumque vides monimenta virorum*. *demol. atque crem.*: Livy XXVIII 19 12 *cremata et diruta urbe*; 20 7 *ignem deinde tectis iniciunt ac diruunt quae incendio absumi nequeunt*: to burn what will burn, and throw down what will not: VII 27 8 *oppidum dirutum atque incensum*; IX 45 17 *quorum pleraque diruta atque incensa*; Suet. Nero 38 *quaedam horrea...ut bellicis machinis labefacta atque inflammata sint, quod saxeo muro constructa sint*: the *atque* (*ac*) binding the two notions together in Lucr. Livy and Suet. alike to my mind adds probability to my *cremare*. [Comp. also Cic. epist. XV 4 10 *omnibus partibus urbis disturbatis aut incensis*.] **245** *neque* cet.: V 91 *ne te in promissis plura moremur*.

246—322: that thunderbolts are formed in dense masses of clouds our eyesight tells us; the wind gathers the seeds of fire in these clouds, and gets ignited by them and the heat from its own rapid motion, till it bursts forth with flashes and loud rattlings followed by heavy rain: sometimes a wind from without bursts a cloud charged with thunder; sometimes the wind gets fired on its journey, losing some of its own atoms and gathering from the air atoms of fire; sometimes the mere force of its blow strikes out fire, as cold steel strikes fire out of a stone; though the wind after such rapid motion can never be quite without warmth. **250** *Quod* introduces not the cause, but merely an illustration of the case in point, as III 208 *Haec quoque res etiam naturam dedicat eius,...Quod simul atque* cet.; see n. there: IV 211 *Quod simul ac primum sub diu splendor aquai Ponitur* cet.; V 285 *id licet hinc cognoscere possis, Quod simul ac primum nubes* cet.: VI 335 *Deinde, quod* cet. is also essentially similar. **251—254** = IV 170—173. **255** *commoliri tempestas fulmina* probably suggested to Virgil *Fulmina molitur* in the passage quoted to IV 172. **257** *Ut picis* cet.: 426 *tamquam demissa columna In mare de caelo*, and 433. **258** *trahit atram* cet.: Virg. geor. I 323 *Et foedam glomerant tempestatem imbribus atris Collectae ex alto nubes.* **259** *tempestatem* comprises all ingredients of the storm; *procellis* are furious winds: 124 *validi venti conlecta procella*; 293 *discidio nubis ventique procella*; Livy XXXIX 46 3 *tempestas cum magnis procellis coorta*; Sen. nat. quaest. V 12 2 *et erumpit in ventum qui fere procellosus est.* **266** *venientes* i.e. nubes, understood from 268 *nubibus* in the dependent clause: a favourite usage of Lucr.; see n. to I 15: with *venientes* comp. I 285 *venientis aquai*: the object of *opprimere* is *terras* of 264. **267** *cum. nat.*: see n. to V 488. **268** *extructis foret nubibus*: with this abl. comp. II 909 *Aut simili* i.e. sensu *totis animalibus esse putari*; III 620 *Atque ita multimodis partitis artubus esse*; Hor. sat. I 5 58 *tua cornu Ni foret exsecto frons.* **271** *supra*, i.e. 206 and 209. **276** *cŭm eo*: see n. to II 404. **278** *acuit*, poetically treating it as a bolt, βέλος, *telum*. *forn. intus*: see n. to IV 1091. **279** *sua cum Mobil.*: see n. to I 287. **285** *sonitus* cet.: 294 *ardenti sonitus cum provolat ictu*; comp. II 1100 *caelique serena Concutiat sonitu*, and n. there. **287** *tremor pertemptat*: Virg. geor. III 250 *Nonne vides ut tota tremor pertemptet equorum Corpora.* **290** *de* = ex: both after and in consequence of: V 651 *ubi de longo cursu sol ultima caeli Impulit*; Ovid met. X 49 *incessit passu de vulnere tardo*; trist. III 3 82 *Deque tuis lacrimis umida serta dato*; see too n. to I 384 *de concursu.* **291** *Omnis* cet.; Virg. geor. I 324 *ruit arduus aether*; Aen. V 695 *ruit aethere toto Turbidus imber aqua*; Martial III 100 3 *Imbribus immodicis caelum nam forte ruebat*; see also n. to I 250: just above, 268 *extructis foret alte nubibus aether.* *in im. v.*: Lucil. III 36 Muell. *Terra abit in nimbos imbremque.* **292** comp. V 255 *Pars etiam glebarum ad diluviem revocatur.*

295 *Est cum*, ἐστὶν ὅτε: his elder contemporary the auctor ad Heren. II 30 *est cum complexione supersedendum est...est cum exornatio praetermittenda est*; IV 36 *est cum non est satius, si* cet.; M. Aurel. to Fronto II 13 *eritne quom te videbo?*; Plaut. capt. 324 *Est etiam ubi...praestet*; Cic. Tusc. disp. V 23 *est ubi id isto modo valeat*; Hor. epist. II 1 63 *Interdum vulgus rectum videt, est ubi peccat*; [ibid. I 10 15 *Est ubi plus tepeant hiemes? ubi...Est ubi divellat somnos minus invida cura?*] **297** *igneus ille Vertex* appears to be forked lightning. **298** *quem*: see n. to III 94. **299** *quoc. tulit* i.e. se: comp. *si forte eo vestigia ferrent* of Livy and the like; [and Cic. epist. V 2 3 *meae enim rationes ita tulerunt.*] **301** *Igniscat*: the mss. of Cicero and Virgil write *ignesco.* **302** *Dum venit, amittens*, **304** *Atque..portat*: a change from the participle to the finite verb, an idiom so common in Greek: see also n. to V 383. **306** *plumbea* cet.: Ovid met. II 727 *cum Balearica plumbum Funda iacit. volat illud et incandescit eundo*; comp. too n. to 178 *plumbea* cet. **313** *ex illa quae tum res*: see n. to I 15. **316** *ad ictum*: comp. I 185 *Seminis ad coitum*, and n. there. **319** *tem. om. plane*: see n. to II 1060 *temere incassum frustraque.*

323—378: the thunderbolt derives its velocity from a union of causes: it acquires momentum within the cloud; as it bursts out of it, this is increased on the principle of missiles discharged from an engine; its atoms are extremely fine; add to this the natural tendency downward, which increases continuously; perhaps too it is aided by blows from atoms which it gathers to itself in the air: its subtle atoms pass through the pores of some things; burst asunder others; melt others. In autumn and spring thunder is most frequent, because then there is a mixture of heat and cold, of fire and wind, as well as moisture; all of which are needed to forge it. **324** *percurrunt*, i.e. usque ad finem currunt: this absolute use of the word which is rare enough, is most learnedly illustrated by Lach.: V 1407 *supera calamos unco percurrere labro*; but IV 588 *Unco saepe labro calamos percurrit*: VI 668 *Perque mare ac terras rapidus percurrere turbo*; Propert. III (II) 16 49 *Vidistis toto sonitus percurrere caelo*; Aetna 99 *Per tota errantes percurrunt corpora venae.* **326** *con. sumit*: 1041 *partem in vacuam conamina sumpsit.* **327** *inpetis* he uses only here, fond as he is of *impete*: observe 327 *inpetis*, 328 *impete*, 334 *impete*, 337 *impetus*, 340 *impete.* **333** *in remorando* has the force of a pres. partic., remoratur et haesitat: IV 720 *in remorando Laedere ne possint ex ulla lumina parte*; III 491 *in iactando membra fatigat*; 706 *in manando dissoluuntur*; VI 143 *Dant in frangendo*; Cic. pro Font. 39 (29) *in appellando significare*; [pro Mil. 79 *in confitendo ab iisne poenam timeret?*;] Ov. trist. III 14 (13) 9 *Inque relinquendo*, which ought not to be tampered with: auctor bell. Africae 63 4 *quae in repugnando erat commorata*; [Caes. b. civ. II 9 8 *in struendo reliquerunt.*] **335** *quod* does not assign the cause, but

merely states the fact, and is like in principle to the cases given in n. to 250, III 208. **339** *itiner*: see n. to V 653 *itere*. **341** *Mobilitatem* cet.: Aen. IV 175 *Mobilitate viget viresque adquirit eundo*. **344** *E regione*: IV 374 *e regione eadem nos usque secuta*: comp. also VI 742, 823, 833; and Cic. de fin. I 19 and de fato; where *ad lineam* and *rectis lineis* are given as synonymes for it; also Livy XXXVIII 5 2 *tria...admovit, unum e regione Aesculapii*; 7 7 *fossam...e regione eius operis...ducere instituunt*: it is merely an extension to a thing in motion of the common meaning, 'over against', 'directly opposite'. **345** *volventia*: comp. V 931 *per caelum solis volventia lustra*, and n. there. **347** *incendunt* is much more poetical than the old vulgate *intendunt*; Wak. and Lach. cite Virgil's *pudor incendit vires*, *Illam incendentem luctus*: comp. too Tac. ann. I 23 *incendebat haec fletu*; and Livy XXI 58 6 *cum eo magis accensa vis venti esset*. **350** *perfringit*, because it falls on all the joinings of the thing, and so breaks it up into its constituent atoms: *perfigit* clearly can have no such force. **351** *texta* is here the partic. agreeing with *corpora rerum* rather than the subst. which elsewhere he uses. **352** *Dissoluit*: see 230. **353** *Confervefacit* seems not to occur elsewhere. **357** *st. fulg. apta*: Enn. ann. 30 *Qui caelum versat stellis fulgentibus aptum*; 162 *Caelum suspexit stellis fulgentibus aptum*; 343 *nox processit stellis ardentibus apta*: the last phrase is twice used by Virgil. **358** *caeli domus*: see n. to II 1110. **359** comp. I 10 *simul ac species patefactast verna diei*; and Manil. II 182 *alter florentia tempora veris Sufficit*. **364** *fretus* expresses at once the strait joining two seas and the swell and surging common in such cross-seas: Varro de ling. Lat. VII 22 *dictum fretum a similitudine ferventis aquae, quod in fretum saepe concurrat aestus atque effervescat*: for the form see n. to I 720 *fretu*. **365** Lach. compares Manil. I 852 *Sunt autem cunctis permixti partibus ignes, Qui gravidas habitant fabricantes fulmina nubis*. **368** foll. comp. Chrysippus' similar definition of spring and autumn in Stob. ecl. I p. 261 262. **368** for the expression comp. Ov. her. XIV 22 *Ultima pars lucis primaque noctis erat*. **369** *quare*: therefore in the spring as there is this mixture of heat and cold, there must be going on the struggle which produces thunder. Lach. refines, nor is his refinement true: 'quaeritur' he says 'quare calor et frigus inter se pugnent: id enim non fit quia ver est, sed quia *Prima pars caloris est postrema rigoris*': the second *quia* is at least as untrue as the first: heat and cold fight because they are together; and therefore in the spring, as also in the autumn. **370** *turbare* is neut.: see n. to II 126. [**373** *confligunt aestatibus*: 'der Dativ nur bei Lucr.' Draeger hist. synt. I p. 383.] **374** *Propterea freta* cet. refers to 364 *Nam fretus ipse anni* cet. *nominitanda*: this word five times used by Lucr. seems scarcely to be found elsewhere: [see corp. inscr. Lat. I 1011 *sum Aurelia nominitata*.]

379—422: such is the true explanation of thunder, not the follies taught in the Tuscan rolls: if the gods do hurl the bolts, why do they pass over the guilty and so often strike the innocent? why does Jupiter thunder only when the sky is clouded? why does he waste his bolts on the sea? why not tell us to beware, if he wishes us to escape? why thunder, if he wishes to take us unawares? how can he hurl at once in so many places? why destroy his own temples and statues? why so often strike the mountain-tops? **379** *Hoc*, 'what I have just said': Wak. prefers to take *hoc* as the abl. 'ut magis Lucretianum'; so that *est* will be for *licet*, a sense it never bears in Lucr. and the older writers: see notes 1 to V 533. **380** *Perspicere* and *videre* have, as so often in Lucr., the force of substantives: see 415 416 and n. to I 331: *Perspicere* cet. *est hoc, non...perquirere* cet. *ipsam*, in its reality. **381** *Tyrrhena* cet.: see Cicero and Pliny quoted in notes to 86 foll. and Sen. nat. quaest. II 32 *quid, quod futura portendunt* cet. *hoc inter nos et Tuscos quibus summa est fulgurum persequendorum scientia interest: nos putamus, quia nubes conlisae sunt, fulmina emitti. ipsi existimant nubes conlidi ut fulmina emittantur. nam cum omnia ad deum referant, in ea opinione sunt, tamquam non quia facta sunt significent, sed quia significatura sunt fiant*: Cic. de div. I 72 speaks of the *Etruscorum et haruspicini et fulgurales et rituales libri*. *retro volventem* 'shew that in his time the Etruscan books were still read in the original, from right to left, *retro*' Niebuhr hist. I p. 111 n. 341: I should have thought it simply meant unrolling, volumina evolventem, retroversum volventem; [comp. Sen. rhet. suas. VI at end *ut librum velitis usque ad umbilicum revolvere*:] though I confess to having no certainty on the matter. What does Val. Flaccus I 782 mean by *iam iam exorabile retro Carmen agens*? 'I will remark by the way that by *indicia mentis* Lucr. means to explain *indigitamenta*' ibid.: but I do not find that the Etruscan books, which are here in question, had anything to do with these *indigitamenta*; which appear on the contrary to have belonged to the purest form of the old Roman worship. **382** *Ind. mentis*: Ov. met. VII 620 *felicia mentis Signa tuae* i.e. Iovis. **383—385** = 87—89, which were copiously illustrated. **386** *de caelo*: see n. to II 51.

388 comp. Terence quoted to II 1100. **390** *quibus incautum scelus est* i.e. qui non caverunt scelus: Sall. hist. inc. 46 *repente incautos agros invasit*; Livy XXV 38 14 *quia quod neglexeris, incautum atque apertum habeas*; Tac. ann. I 50 *hostibus incautum* i.e. iter; Silius II 98 *rueretque inopina sub ictu Ante fera incauto, quam sibila poneret arcus*. *aversabile* seems to occur only here. **392** *perfixo*: see n. to II 360: with this and **395** *Turbine* cet. comp. Aen. I 44 *Illum expirantem transfixo pectore flammas Turbine corripuit*. *documen* seems to be in apposition with the preceding sentence: Socrates in the clouds 399 feels the same difficulty, Εἴπερ βάλλει τοὺς ἐπιόρκους, πῶς οὐχὶ Σίμων' ἐνέπρησεν

Οὐδὲ Κλεώνυμον οὐδὲ Θέωρον; καίτοι σφόδρα γ' εἴσ' ἐπίορκοι. **393** *sibi conscius in re* appears to be like Cic. ad Att. I 18 1 *mihi in privatis omnibus conscius*; [Prop. I 10 2 *vestris conscius in lacrimis*:] he is self-conscious in the thing, that is conscious that he has done it: Cic. ad Att. II 24 3 has *his de rebus conscium*; Sall. Cat. 35 2 *conscientia de culpa*. **395** comp. v 1231 *violento turbine saepe Correptus*. **390—396** are expressed more briefly II 1102 foll. **396** *Cur etiam loca sola* cet., **404** *In mare qua* cet., **421** *Altaque cur plerumque* cet.: Cic. de div. II 44 is so like in expression that he would seem to have had Lucretius' lines in his memory: *scilicet si ista Iuppiter significaret, tam multa frustra fulmina emitteret! quid enim proficit, cum in medium mare fulmen iecit? quid, cum in altissimos montis, quod plerumque fit? quid, cum in desertas solitudines?* **397** *consuescunt*: see n. to IV 1282 *insuescat te*. **402** *simul ac nub. succ.*: v 286 *simul ac nubes primum succedere soli Coepere*. **403** [*prope*: Mart. I 49 29 *veniet tibi Conviva clamatus prope*.] *determinet*, mark the point to which they are to go. **404** *quid* may be called the cognate accus.: this use of the neut. pron. is of very extended application in Latin: N. P. Howard compares Plaut. trin. 96 *Si id me non accusas*; Amph. 859 *sic me insimulare falso facinus tam malum*. **405** *cam. nat.*: see n. to v 488. **410** *concit*: see n. to I 212 *cimus*. **411** comp. Cic. l. l. *esset mirabile quomodo id Iuppiter totiens iaceret, cum unum haberet; nec vero fulminibus homines quid aut faciendum esset aut cavendum moneret*. **413, 416** *uno sub tem.*=eodem tempore: comp. Ov. fasti v 491 *haec tria sunt sub eodem tempore festa*; met. I 494 *iam sub luce*; 603 *Sub nitido die*; Aetna 190 *sub exiguo tempore*; Manil. III 249 *vario sub tempore*; 245 *luce sub omni*; 671 *sub utroque tempore*; v 635 *sub tali tempore*; [Livy XXV 24 7 *sub luce Hexapylo effracto*:] see n. to IV 545 *sub murmure*, where the use of *sub* is essentially the same. **415** *pluere*, **416** *fieri* are used as subst.: see 380, v 979 *Non erat ut fieri posset mirarier*; and n. to I 331: just above he has *factum, Ut fierent*, the usual constr.: notice the indifference with which he repeats *fieri, fieri*; *factum fierent*: 727 he has *fit uti fiat*, 729 *fit uti fiant*; IV 448 *fit uti videantur...fieri*; Cic. orator 202 *ita fit ut..... fiat*; Livy is not averse to *ut fierent factum est* and the like; Ov. ex Ponto III 137 *di faciant, copia fiat*; 6 15 *facis ut fiat*. **417** foll.: II 1101 more briefly *fulmina mittat et aedis Saepe suas disturbet*; Socrates l. l. Ἀλλὰ τὸν αὑτοῦ γε νεὼν βάλλει καὶ Σούνιον ἄκρον Ἀθηνῶν; Cic. l. l. 45 and I 19 quotes his own verses, *Nam pater altitonans stellanti nixus Olympo Ipse suos quondam tumulos ac templa petivit Et Capitolinis iniecit sedibus ignis. Tum species ex aere vetus...Et divom simulacra peremit fulminis ardor*. **421** *eius* is the gen. after, not agreeing with *ignis*.

423—450: presters are thus formed: if the wind cannot break the cloud, it forces it down in the shape of a column to the sea, where it

bursts and causes a furious boiling and surging: sometimes the whirlwind will gather up atoms of cloud and wrap them round, and will so imitate a real prester: this will shew itself sometimes on land, but oftener on the sea.—Epic. in Diog. x 104 explains these *presteres*: Pliny II 131—134 will throw more light on Lucr. [**429** *deprensa*: Catull. 25 13 *Deprensa navis in mari*, and Aeneid quoted there by Ellis; Hor. od. II 16 1 *in patenti Prensus Aegeo*.] **430** *Navigia* cet.: Pliny l. l. 132 *praecipua navigantium pestis, non antemnas modo verum ipsa navigia contorta frangens*; Sen. nat. quaest. v 13 3 *totae naves in sublime tollantur*. **431** *Hoc fit* cet.: the wind having become fiery by its rapid motion in the cloud cannot burst it; if it could, it would then be *fulmen*, as explained above so fully; but not being able to break the cloud, it pushes it down to the sea in the way described: Lucr. seems to assume that the word πρηστήρ will indicate its fiery nature without further specification. With this, and what follows, **438** *Versabundus enim turbo* cet., **443** *venti—Vertex*, **447** *Turbinis—procellae* comp. Pliny l. l. 133 *quod si maiore depressae nubis eruperit specu, sed minus lato quam procella nec sine fragore, turbinem vocant proxima quaeque prosternentem; idem ardentior accensusque dum furit, prester vocatur amburens contacta pariter et proterens...quod si simul rupit nubem exarsitque et ignem habuit, non postea concepit, fulmen est. distat a prestere quo flamma ab igni; hic late funditur flatu, illud conglobatur impetu. vertex autem remeando distat a turbine et quo stridor a fragore; procella latitudine ab utroque, disiecta nube verius quam rupta*: Seneca l. l. *hic ventus circumactus et eundem ambiens locum ac se ipsa vertigine concitans turbo est. qui si pugnacior est ac diutius volutatur, inflammatur et efficit quod prestera Graeci vocant: hic est igneus turbo*. **432** *coepit*: see n. to I 55 *incipiam*, and comp. *coeptum*. **438** *Versabundus*: 582 *Versabundaque portatur*. **439** *cum*: see n. to I 755. **440** *simul ac gravidam*, the only instance in Lucr. of *ac* before a guttural: for the reason of this exception see n. to I 281. **443** *involvat* cet. i.e. does not get enclosed in the dense clouds, but eddying about catches up stray particles of cloud and makes a case for itself. **446** *Hic* refers to *prestera* of 445; though it may include the imitation, as well as the genuine *prester*. **447** *Turbinis* and *procellae* as well as *vertex* are discriminated by Pliny cited above: *turbinis* then will denote the tornado in the neighbourhood of the place where the *prester* bursts; *procellae* the storm of wind spreading itself far and near. *provomit* appears not to occur elsewhere. **450** *Prosp. maris in magno* i.e. in mari quod late prospectum praebet: Ovid her. x 27 *atque ita late Aequora prospectu metior alta meo*; Sen. epist. 89 21 *in vastum terrarum marisque prospectum*.

451—494: clouds are thus formed: first many particles in the sky get entangled and form small clouds; and then these unite, until the sky is overcast: thus high mountains are seen to smoke with mist,

because the small particles of cloud are first carried to these by the wind: then moisture steams up from the sea and rivers; and the pressure of the ether above condenses it; finally many atoms, flying as I have shewn through space, come into this heaven of ours, and increase the mass from all sides.—Epic. in Diog. x 99 gives a brief explanation of clouds, agreeing essentially with this of Lucr. **453** *moris*, properly whatever holds or detains, and thence it has the force of *nexus*: Lach. compares 531 *mora quae fluvios passim refrenat euntis*; Aen. x 485 *Loricaeque moras*; and refers to Gronovius Sen. de benef. v 12 2 *commissuras eorum et moras*: in addition to his and Gronovius' instances comp. Plaut. Stichus 309 *fores facite ut pateant: removete moram*; Aen. XII 541 *clipei mora*; Sen. Thyest. 762 *lacertorum moras*; Phoen. 246 *Uterique nondum solveram clausi moras*; Lucan VI 217 *moras ferri . . rumpit*; Stat. Theb. XI 244 *portarum moras*. **456** *haec* is fem. plur. as it appears to be III 585; but see n. there: *hae* does not occur in Lucr., and in his time *haec* must have been the usual form, and is sometimes preserved in the best mss. of Cicero Caesar Varro Virgil Livy and Ovid as well as Plautus Terence and others. *comprendunt inter se*=mutuo se comprendunt: comp. I 787 *inter se mutare*, and n. there. **458** *temp. saeva co.*: Virg. geor. III 478 *miseranda coorta est Tempestas*, with quite another sense. **460** *Quam quoque magis*: comp. III 700 *Tanto quique magis*, and n. there. **465** *coorta* is neut. plur. here as in IV 530, and I now think in VI 253: III 15 *divina mente coortă*, the constr. is the same: VI 511 *coacta* seems the abl. sing. **474** *quoque* clearly belongs in strictness to *multa* or *e salso momine*; see n. to V 192. **475** *um. ol.*: the clouds and the sea. **482** comp. V 466 *Corpore concreto subtexunt nubila caelum*. **483** *huc*, into the heaven of our *mundus* from some other part of space. **485** *numerum*, of *corpora* or atoms. *inn. num.*: II 1054 *Seminaque innumero numero summaque profunda Multimodis volitent*; where see note: but here *summam profundi* refers to infinite space; as *spatium profundi* more than once. **486** *docui*, the former point I 1008—1051; the latter 988—1007. **487** *ostendi*, II 142 foll. **488** comp. IV 192 *Inmemorabile per spatium transcurrere posse*. **490** *Mont. tam mag.*: comp. 189 *montibus adsimulata Nubila*; and IV 140 *magni montes* cet.: **491** *inpensa*=quae inpendent: see n. to II 363.

495—526: rain comes in this way: many particles of matter rise with the clouds from all things; then the clouds suck up much moisture from the sea and rivers; thus the clouds both by their own weight and the pressure of the wind emit rains; and these are increased by the sun helping to dissolve the clouds: rains are heavy and lasting, when these causes combine, and the reeking earth sends its moisture back: the rainbow comes from the sun shining right upon a mass of cloud. **496** *ut imber*: 1099 *Aut extrinsecus ut nubes nebulaeque* cet. **499** *utrumque*

Et nubis et aquam, like the ἀμφότερον of Homer and the Greeks: Plaut. cistell. I 3 1 *Utrumque haec et multiloqua et multibiba est anus*; Gratius cyneg. 333 *Utrumque et prudens et sumptis impiger armis*: sometimes *utrumque* is put at the end; as Plaut. trin. 461 *Nam et stulte facere et stulte fabularier Utrumque, Lesbonice, in aetate haud bonumst*; Lucil. XI *Et formosus homo fuit et famosus utrumque*; dirae 96 *Sive eris, et si non, mecum morieris utrumque*: comp. too III 658 and my note there. **503** *Concipiunt* i.e. nubila, understood from the accus. *nubila* of 505: see n. to I 15. **507** *bene* cet. i.e. bene multa semina. **511** *coacta* appears to be the ablative. **512** *de supero*: comp. *de subito* and the like: it is the older and correcter form of *desuper*. **513** *rarescunt* cet.: 214 *Fulgit item, cum rarescunt quoque nubila caeli; Nam cum ventus eas leviter diducit euntis Dissoluitque* cet. **514** *super*=insuper: see n. to I 649. **517** *utraque*, as in IV 86 and 291. **518** *vi cumulata*: 511 *Copia nimborum turba maiore coacta*: with the expression comp. 734 *nubes coguntur vique premuntur*. **519** *tenere*: Lach. compares Livy XXIII 44 6 *imber continens per noctem totam usque ad horam tertiam diei insequentis tenuit*; and refers to Duker on IV 7 7 and VI 35 10 who quotes several other examples of the same use, II 3, III 19, XXIV 47, XXV 39, XXXIII 22, XXXVI 43: add VII 39 11, XXV 15 16, 27 6 *qui* (i.e. venti) *tum tenebant*, XXVII 5 15, XXXIX 22 3, XL 8 20; Ov. ars I 445. **521** *aliis aliae...Insuper*: comp. 191 *cumulata videbis Insuper esse aliis alia*; and n. there. **523** *redhalat* seems not to occur elsewhere: for form comp. *redhibeo*: *rehalo* of old eds. is a barbarism. **525** *Adversa asp.*=aspargine nimb. ex adverso. *aspargine*: comp. I 719 *aspargit*, and n. there. **526** *arqui*: the best mss. of Cic. de nat. III 51 have the same form; and Nonius cites from Varro the nom. plur. *arci*: see Neue I p. 543.

527—534: all other like things, whether existing by themselves or formed in the clouds, snow wind hail and frost, may be all easily explained, if you understand the properties of atoms. **527** *sorsum crescunt* is intended to be a verbal as well as real antithesis to *concrescunt*. **530** *geli*: see n. to V 205. *mag. dur. aq.* and **531** *Et mora* cet. are different expressions for the same thing and are both explanations of the *vis geli*; the iteration is designed to be emphatic: Virg. geor. IV 136 *glacie cursus frenaret aquarum*. **531** *mora*: see n. to 453. **532** *tamen*: notwithstanding their number and variety, they may yet be all readily explained. **533** *quareve*=quareque: see n. to I 57.

535—556: earthquakes have more than one cause: underground are caverns rocks rivers and lakes: well, when any of these caverns tumble in, whole mountains may fall and shake the earth; or if a mass of earth tumble into the large pools of water, the oscillation of the water may make the earth reel.—Epic. in Diog. x 105 106 attributes earthquakes to somewhat similar combinations of causes, and adds in his usual way

καὶ κατ' ἄλλους δὲ τρόπους πλείους τὰς κινήσεις ταύτας τῆς γῆς γίνεσθαι: Seneca devotes the whole of the sixth book of his nat. quaest. to the same subject; chap. 20 recounts first the theories of Democritus, and then of Epicurus: Seneca here and in what precedes and follows illustrates Lucr. better than Epicurus does, having had access of course to larger works of the latter: *veniamus nunc ad eos qui omnia ista quae rettuli in causa esse dixerunt aut ex his plura. Democritus plura putat. ait enim motum aliquando spiritu fieri, aliquando aqua, aliquando utroque*, just as Lucr.; then 20 5 *omnes istas posse esse causas Epicurus ait pluresque alias temptat et alios qui aliquid unum ex istis esse adfirmaverunt corripit* cet.; he then proceeds to employ wind and water in much the same way as Lucr. does. **538** and **552** *lucunas*: see n. to III 1031. **538** *lucunas*, to distinguish it from *lacus*, may mean here chasms not filled with water, a sense it often bears, though 552 he says *in magnas aqüae vastasque lucunas*; which would also shew that *lucunas* cannot well mean small pools in contradistinction to *lacus*; so that in fact it may be a mere poetical tautology, as 539 *rupes deruptaque saxa*: comp. I 115 *vastasque lucunas* and n. there. **542** *similem* cet.: this appears to follow from Epicurus' *ἰσονομία* or as Cicero de nat. I 50 translates it *aequabilis tributio; ut omnibus omnia paribus paria respondeant.* **543** *subi. supp.* must surely have their literal sense, referring to what he has just said is below ground. Creech plainly and Lamb. apparently take the meaning to be, 'these points being assumed and taken for granted': the latter says *τούτων δὴ ὑποκειμένων καὶ ὑποτεθέντων*: but I find no authority whatever for giving the Latin words the metaphorical meaning which these Greek words have, and Lamb. may have used them too in their literal sense. **544** *superne tremit* cet.: so Epic. according to Seneca l. l. *fortasse aliqua pars terrae velut columnis quibusdam ac pilis sustinetur, quibus vitiatis ac recedentibus tremit pondus impositum.* **547** *disserpunt* I find only here. **549** *non magno pondere* and *tota* gain point and force by being placed together and divided from *plaustri* and *Tecta* respectively; but yet the wide separation of *plaustri* and *non magno pondere* is harsh: but see n. to IV 905 *pondere magno*. Sen. epist. 90 9 *longo vehiculorum ordine vicis intrementibus.* **550** *exultant ut scrupus* is assuredly near the ductus litterarum of *exultantes dupuis*, *ut* being passed over after *nt*: *ut*, 'where', is used before him by Lucil. VIII 18 Muell. *flumen uti adque ipso divortio* [*aquae sunt*]; by his contemporary Catullus, 11 3 and 17 10; by Virgil Aen. V 329 *ut forte*; Cic. Verr. V 30 *in ipso aditu atque ore portus, ut* (mss. *ubi* editions) *primum ex alto sinus ab litore ad urbem inflectitur*: Haupt ind. lect. 61 62 p. 6 shews that Ov. met. I 15 probably wrote *Utque aer, tellus* cet., as Cicero certainly translates Aratus 230 *ἦχί περ ἄκραι χηλαὶ κ.τ.λ.*, by *ut prius illae Chelae*, and Germanicus by *Ut Chelae, candens ut balteus Orionis*: [comp. too Plaut. Amph. 1083 *Ut iacui exurgo*: and perhaps 237 *Quisque, ut steterat, iacet optinetque ordinem*; for see ibid. 1079 *Ubi quisque institerat, concidit crepitu.*] Lucr. may well then have written *ut cumque* for *ubicumque*, as does Mela I 86 *utcumque* (so all mss. and Parthey rightly) *Ioniam vocant.* *scrupus viai* would be a rough loose stone on the public way: with this and what precedes and follows comp. Sen. l. l. 22 1 *prius ergo de motu quatiente dicamus. si quando magna onera per vices vehiculorum plurium tracta sunt et rotae maiore nisu in salebras inciderunt, terram concuti senties* cet.; 23 *huius motus succutientis terras haec erit causa*; [Pliny paneg. 51 *non . . immanium transvectione saxorum urbis tecta quatiuntur.*] **551** Virg. geor. III 361 has *ferratos sustinet orbes*, just following an imitation of Lucr. *succutit*: Ovid met. II 166 *Succutiturque alte similisque est currus inani.* **552** *aqüae*: so 868 *aqüae*, 1072 *aqüai*: 'similiter Horatius, isque unus inter omnes, *siluae* tribus syllabis dixit' Lach.: but there is a difference there in quantity, and *silüae* more resembles the *solüo dissolüo* which so often in Lucr. alternate with *solvo dissolvo*: he also compares *larüa larva, milüus milvus*: his examples of *aqüa* from Plautus and others are very uncertain; neither Ritschl nor Fleckeisen I see recognises the one from the mil. glor.: Ritschl I now see in his opusc. II p. 600 denies this form to Plautus, and questions it in Lucr.: it is true that in 868 *laticis* may come from Lucr. and *aquae* be the gloss; but yet the 3 passages seem to me to lend each other great mutual support. [See too Bergk in Philologus vol. 33 p. 277.] **554** *aquae fluctu quoque*, as well as the other causes given above: but this second *quoque* is not wanted.

557—576: again when the wind underground presses on these caverns, the earth above leans in the same direction, so as to bring things within an ace of destruction; a presage of the earth's total ruin, which must come one day.—With this and the next paragraph comp. Seneca l. l. 20 7 *nullam tamen illi* (i.e. Epicuro) *placet causam motus esse maiorem quam spiritum. nobis quoque placet hunc spiritum esse qui possit tanta conari.* **561** *extr. dom.*: see n. to 1283 *aliena rogorum extructa.* **562** i.e. quantoque magis cet., tam magis inclinata cet. **563** *tument*, as a wall does on the side towards which it leans: Pliny II 163 *in poculis repletis media maxime tument.* *prodita* = proiecta, or procumbentia: 606 it has the same meaning, but is there more emphatic. **565** *Et metuunt* = et dubitant: Catull. 64 146 *Nil metuunt iurare, nihil promittere parcunt*; Juv. V 5 *Quamvis iurato metuam tibi credere testi*; [Plaut. Amph. 112 *Non metuo quin* cet.:] comp. Virg. geor. II 433 *Et dubitant homines serere atque impendere curam?*; Aen. VI 806 *Et dubitamus adhuc virtute extendere vires!*; [Sen. rhet. controv. I praefat. 23 *et putant illum homines hac virtute caruisse!*] **568** *respirent*, 570 *respirant*: Cic. pro Quinct. 53 *respirasset cupiditas atque avaritia paulum*; Phil. VIII 20 *ne punctum quidem temporis . . oppugnatio respiravit*;

Annaeus Florus ap. Jahn praef. ad Flor. p. XLIII *hic cum ego respirassem, statim Baeticus*: Lucr. picturesquely unites the literal and metaphorical meanings of the word. *vis nulla* cet.: I 850 *neque ab exitio res ulla refrenat.* **569** *reprehendere*: III 583 *Extremum cupiunt vitae reprachendere vinclum*: a common sense, as Cic. acad. pr. II 139 *revocat virtus vel potius reprendit manu*; Livy XXXIV 14 8 *adeo turbati erant dextrae alae pedites equitesque, ut quosdam consul manu ipse reprenderit et aversos in hostem verterit.* **570** *Nunc*: see n. to I 169. **571** all the terms are military. **573** *facit*: I 740 *fecere ruinas*: it is the same as *dat ruinas*. *recellit*=reclinat: Festus p. 274 '*recellere* reclinare, et *excellere* in altum extollere'; Marullus in marg. cod. Victor. '*recello* sicut *excello* et *antecello*': Livy XXIV 34 10 thus uses the word. **574** *prolapsa* answers to *inclinatur*, *recipit sedes in pondere* to *retro recellit*: falling forward out of its place is the natural force of *prolapsa*: see Forc. and comp. 1006 *primordia ferri In vacuum prolapsa cadunt coniuncta*: *recipit sedes in pondere* then is a proper expression, not *prolapsa in pondera*: a thing *prolabitur trans pondera*, tumbles beyond its balance or centre of gravity; thus Livy has *rem prope prolapsam restituit*; *prolapsam eam erexisse*; *prolapsum imperium retentum ac recuperatum esse*, and the like. Lach. illustrates this sense of the plur. *pondera*: but when he adds 'sed *pondus* singulari numero ita dici non posse Turnebus [advers. IV 17] recte observavit', he and Turnebus are both greatly mistaken: Ovid met. I 12 writes *Nec circumfuso pendebat in aere tellus Ponderibus librata suis*, and Lucan I 57 *Sentiet axis onus; librati pondera caeli Orbe tene medio*; but then with precisely the same force Manil. I 173 has *Quodni librato penderet pondere tellus*, Petron. sat. 124 v. 264 *Sentit terra deos mutataque sidera pondus Quaesivere suum*: Hor. epist. I 6 51 says *cogat trans pondera dextram Porrigere*; but then with just the same meaning Petron. 136 *fracta est putris sella, quae staturae altitudinem adiecerat, anumque pondere suo deiectam super foculum mittit*; Pliny paneg. 26 *ut desectum corpore caput nutaturumque instabili pondere*; Sen. Thyest. 697 *Nutavit aula dubia quo pondus daret*; Stat. Theb. V 374 *instabili procumbens pondere*; XII 435 *ipsae etiam commoto pondere paulum Secessere trabes*; Aetna 324 and 346: for the plur. comp. Sen. Hipp. 973; Stat. Theb. III 37: reason and ms. authority then are both for *pondere*; as *pondus* and *suas sedes* are almost synon.: recipit suas sedes vel pondus, et manet in suis sedibus vel pondere. In fact Lucr. thus uses the sing. only: see my note to II 218. **576** *perhilum* seems a ἅπαξ λεγόμ.

577—607: again when wind and air enter from without or rise up from the ground into these caverns, after eddying about they sometimes cleave the crust of earth and swallow up whole towns; or, if they do not break through, yet they cause the earth to quake, and excite in men a feeling that the world will one day perish.—Epicurus in Seneca l. l. seems

briefly to refer to the same cause: *potest terram commovere impressio spiritus: fortasse enim aer alio intrante aere agitatur.* **577** *haec eiusdem quoque*: *quoque* seems manifestly to belong to *haec*; haec quoque causa est eiusdem cet.; see n. to V 192: he appears not to avoid allowing one or more words to come between *quoque* and the word to which it belongs; see also n. to IV 532. **579** *ipsa*: see n. to IV 736. **584** *concinnat hiatum*: he has also *concinnat fervorem, amorem, id.* **585** *In Syria Sidone* probably refers to the earthquake which Strabo p. 58 recounts on the authority of Posidonius, καταποθῆναι πόλιν ἱδρυμένην ὑπὲρ Σιδῶνος, καὶ αὐτῆς δὲ Σιδῶνος σχέδον τὰ δύο μέρη πεσεῖν...τὸ δ' αὐτὸ πάθος καὶ ἐπὶ τὴν Συρίαν ὅλην διέτεινε. *Aegi*: he refers to the famous earthquake of B.C. 372 which swallowed up Helice and Bura and ten Lacedaemonian triremes moored off the coast: Ovid met. XV 293 *Si quaeras Helicen et Burin, Achaidas urbes, Invenies sub aquis*: it is mentioned by many Greek and Latin writers, by Seneca l. l. more than once, as 23 4 *Callisthenes in libris quibus describit quemadmodum Helice Burisque mersae sunt, quis illas casus in mare vel in illas mare immersit, dicit id quod in priore parte dictum est, 'spiritus intrat terram per occulta foramina* cet.': Lucr. mentions Aegium no doubt because it was in his time the chief town of Achaia and is near the two in question; Sen. l. l. 25 4 *illa vasta concussio quae duas suppressit urbes Helicen et Burin, circa Aegium constitit*: Lucr. probably had read Callisthenes. **587** *Disturbāt*: see n. to I 70 *Inritat.* **591** *nisi* si non: see n. to I 1012 *nisi terminet.* **595** *tremere atque movere*: 1190 *nervi trahere et tremere artus*; where Lach. attempts to define when you may or may not use *trahere* or *movere* for *trahi* or *moveri*: if a man's limbs are moved by himself or by a sensible external cause, you must use the passive *membra moventur*; if no cause be apparent, then you may say *membra movent*; and thus *terra movet*, because it has no power of moving itself nor do you perceive why it moves: on this principle he will not in III 571 tolerate the *movere* of mss. but reads *moveri* with Lamb.: the same reasoning applies to *trahere* for *trahi*: how far does this rule suit I 397 *Ipse in se trahere*? of course in all cases the passive *may* be used. **601** *Proinde licet quamvis*, **603** *Et tamen*: 620 *Proinde licet quamvis* cet. *tamen*; Cic. de nat. III 88 *quamvis licet menti delubra et virtuti et fidei consecremus; tamen* cet.; Tusc. IV 53 *quamvis licet insectemur istos*; where Bentl. 'bene quidem, quod lectionem hanc *quamvis licet* in textum recepisti. sed dum utramque particulam eiusdem potestatis esse credis, erras cum aliis quibusdam viris doctissimis. *quamvis* enim hic valet *quantumvis*, non *quamquam*': 'they may as much as they please' is the force of the words. **602** *aet. mand. sal.*: II 570 *neque in aeternum sepelire salutem.* **604** *Subdit* cet.: Sen. Agam. 133 *Mixtus dolori subdidit stimulos timor.* *qu. de parte*: 820 *Ut spatium caeli quadam de parte venenet.* **605** comp. I 1106 *Terraque se pedibus raptim subducat.* **606** *rerumque*

cet.: I 1104 *Et ne cetera consimili ratione sequantur*, 1107 *Inter permixtas rerum caelique ruinas*: *rerum summa* here = haec rerum summa, or mundus, as the context shews: see n. to I 1008.—He loses no occasion of reminding us how great the delusion of many is in supposing that our world is eternal: this he has refuted at great length in the early part of V: our *mundus* and every other *mundus* will perish as certainly as the universe, the *summarum summa*, will be immortal and unchangeable for everlasting.

608—638: the sea does not grow larger, because its size is enormous compared with the supplies from rivers and springs and rains; the sun and winds too and clouds all draw off much, as they act upon so wide a surface; then as water comes through the porous earth into the sea it passes in like manner from the sea back to the earth.—Manifestly, as Lach. shews, this paragraph has no connexion in language and not much in meaning with what precedes and follows, and must be a later addition of the poet's, not properly embodied with the rest. **612** *rigant* in sense can only apply to *terras*. **613** *ad* cet.: comp. 679 *Nil sint ad summam*; and n. there: Cic. Tusc. I 40 *terram...ad universi caeli complexum quasi puncti instar optinere*. **614** *adaugmen*: another ἅπαξ λεγόμ.: see n. to I 435 *Augmine*. **615** *magnum* seems intended by its position to be emphatic, utpote magnum: then *magnam* immediately follows with his usual indifference to such repetitions. **619** *pelage*: V 35 *pelageque sonora*. **626** comp. Virg. geor. III 360 *Concrescunt subitae currenti in flumine crustae*, with a quite different application; as so often in his imitations. *luti concr. crust.*: Frontin. de aquis 122 *aut enim limo concrescente qui interdum in crustam indurescit* cet. **627** *docui*, 473 foll. and 503 foll. **630** *Cum* cet.: Aen. X 807 *Dum pluvit in terris*; where Servius 'si iunxeris *Dum pluit in terris*, erit archaismos, debuit enim dicere *in terras*. tamen sciendum hemistichium hoc Lucretii esse cet.': it is better with Lach. to look upon *in terris* as a pleonasm natural in an old writer. **631** *cum*: see n. to I 755. **632** *coniunctast*, i.e. cum mari. **635—638** = V 269—272, except that for 637 *Confluit, redit* V 271 has *Convenit, fluit*: the reason of the change to *redit* is obvious.

639—646: now to explain the eruptions of Aetna, one of which struck neighbouring nations with such fear and awe. **639** *fauces*: 702 he says that *fauces* and *ora* are the proper Latin terms for craters. **642** *dominata*: *dominantur*, *dominatus*, *dominantior* he has already applied in this book to the power of lightning. **643** *gentibus*: for the dat. see n. to 729. **646** *moliretur*: Cic. de nat. II 59 *nec ea quae agunt molientium* (i.e. deorum) *cum labore operoso ac molesto*. Cicero l. l. 96 thus describes an eruption, *nos autem tenebras cogitemus tantas quantae quondam eruptione Aetnaeorum ignium finitimas regiones obscuravisse dicuntur, ut per biduum nemo hominem homo agnosceret* cet.:

what the eruption is or whether it is the same to which the two refer, I do not know.

647—679: to understand such eruptions, reflect that our world is a smaller fraction of the universe than a man is of the whole world: now we are not surprised when a man is seized with any one of numerous diseases, the seeds of which our world supplies; why then wonder that out of the universe should rise up the seeds of these or any other great natural convulsions? if you say the conflagration is here too great to comprehend, I reply that its rarity only makes it so appear; as we are creatures of habit, and wonder at what is strange and cease to wonder at what is common. **649** *summam rerum* has here its proper force: see n. to I 1008. *profundam*: see n. to IV 63. **651** *multesima pars* is quoted by Nonius p. 136, as 'nove posita': Lucr. has formed it on the analogy of *millesimus*, with the sense of πολλοστός. **652** *tota pars*, *quota* is found in Manil. III 420: *tŏtus* is a very rare word having the same relation to *quotus*, that *totiens* has to *quotiens*. **653** *contueare* means perhaps the act of examining, and *videas* the seeing and understanding which thence results; otherwise the phrase would be very tautological. **660** comp. 1167 *ut est per membra sacer dum diditur ignis*; Celsus V 28 4 *sacer quoque ignis malis ulceribus adnumerari debet*; he proceeds to describe at length two kinds: above, 28 31 and 33, he had described what ἐρυσίπελας *Graeci nominant*; so that if the latter correspond to our erysipelas, the *sacer ignis* must be different: Celsus by *sacer ignis* appears to understand one kind of the ἕρπης of the Greek physicians; others certainly make it to be erysipelas, as Isidore orig. IV 8 4 *erysipelas est quem Latini* sacrum ignem *appellant, id est execrandum per antiphrasim*. **665** *Sic igitur* cet.: as this world is sufficient to supply endless disorders to man, so can the whole universe furnish the materials for endless disorders to our world, such as earthquakes, volcanic eruptions and the like. **666** *Ex inf.* cet.: I 996 *suppeditantur Ex infinito cita corpora materiai*; 1035 *nisi materiai Ex infinito suboriri copia posset*. **669** *Ig. ab. Aetn.*: Sen. nat. quaest. II 30 *Aetna aliquando multo igne abundavit*. *flammescere* is found in no other writer of authority. *flam. cael.*: Aen. III 574 *Attollitque globos flammarum et sidera lambit*: but *flammescere caelum* and *ardescunt caelestia templa* strike me as somewhat frigid hyperboles in what is intended for a philosophical description, as no one could take the flaming heaven to be anything more than a mere ocular deception; unless indeed Lucr. refer to something like what Seneca l. l. records of the eruption of Aetna: *illo tempore aiunt tunc plurima fuisse tonitrua et fulmina quae concursu aridorum corporum facta sunt, non nubium quas verisimile est in tanto fervore aeris nullas fuisse*. The 'caelum ardere visum' was common among the ancient prodigies and may have inspired a traditional terror. **671** *coortu*: this word, which occurs II 1106, is also Lucretian. **672**

tetulerunt: this form is common enough in the older writers. **678** *omnia* cet.: not only this fire of Aetna, but all things in the world together with the world itself are as nothing compared with the universe; and should therefore excite no wonder. **679** *Nil sint ad*: comp. 613; and Cic. de orat. II 25 *quem cognovimus virum bonum et non illitteratum, sed nihil ad Persium*; pro Deiot. 24 *credo, Caesar, nihil ad tuum equitatum*; Ter. eun. 361 *at nihil ad nostram hanc*; Cic. de fin. II 85 *quid ad utilitatem?*; Plato Hipp. ma. 281 D φαύλους πρὸς ἡμᾶς: 'to' is often so used in old English: 'war is no strife To the dark house and the detested wife'. [Comp. also Eurip. frag. 96 'Αλλ' οὐδὲν ηὑγένεια πρὸς τὰ χρήματα; Plaut. trin. 723 *Credo ad summos bellatores acrem—fugitorem fore*; Bacon (Spedding vol. 7 p. 230) *for what are the sands of the sea to the sea, earth, heavens? and all these are nothing to thy mercies.* See Draeger hist. synt. I p. 539 c.]

680—702: Aetna emits its flames in this way: caverns of rock run under it, full of wind which heats first itself and then the rocks and earth with which it comes in contact, and then burst out with flame ashes smoke and huge stones: again caverns reach from the sea to the mountain; through these pass from the sea water and wind mixed; this wind and water force up flame and rocks and clouds of sand. **680** *tamen*, after this digression or preface. **681** *Aet. forn.*: Virg. geor. I 472 *undantem ruptis fornacibus Aetnam.* **683** *fere*: see n. to I 14 *ferae* (fere). **689** *rectis*: see n. to II 217. **690** foll.: geor. I 471 foll. and still more Aen. III 571—577 shew many traces of imitation. **697** *hac ire* cet.: Justin IV 1 will throw much light on the meaning here and shew the nature of the hiatus: *est autem terra ipsa* (i.e. Siciliae) *tenuis ac fragilis et cavernis quibusdam fistulisque ita penetrabilis ut ventorum tota ferme flatibus pateat; nec non et ignibus generandis nutriendisque soli ipsius naturalis materia, quippe intrinsecus stratum sulpure et bitumine traditur: quae res facit ut spiritu cum igne in materia luctante frequenter et compluribus locis nunc flammas, nunc vaporem, nunc fumum eructet. inde denique Aetnae montis per tot saecula durat incendium, et ubi acrior per spiramenta cavernarum ventus incubuit, harenarum moles egeruntur...eadem causa etiam Aetnae montis perpetuos ignes facit. nam aquarum ille concursus raptum secum spiritum in imum fundum trahit atque ibi suffocatum tam diu tenet, donec per spiramenta terrae diffusus nutrimenta ignis incendat.* **698** *penetrare penitus*, a favourite assonance: I 529 *penitus penetrata retexi*; II 539 *Ut penitus nequeat penetrari*: Lachmann's remark 'hoc enim (i.e. *penitus*) ad *penetrare* pertinere non est veri simile' strikes me as very strange; as well as the union of confidence and ill-success with which he treats the whole passage. **700** *arenae*: comp. Justin and Seneca quoted above. Lucr. shews here his habitual accuracy of observation and vividness of description: all the principal features of an eruption are brought into clear relief. Virg. geor. III 241 *nigramque alte subiectat harenam* with a quite different application. **701** *crateres* gives a lively picture of the thing, which neither *fauces* nor *ora* does.

703—711: in the case of many things you must state several causes, to be sure of including the actual cause: for instance if you see a dead body at some distance, you may have to suggest this and that cause, though you are sure only one has occasioned the death.—Such an introduction to a series of cases which admit of more than one explanation is, as has often been remarked above and as may be seen in Epicurus' letter to Pythocles, very characteristical of this philosophy: τὸ δὲ μίαν αἰτίαν τούτων ἀποδιδόναι, πλεοναχῶς τῶν φαινομένων ἐκκαλουμένων, μανικόν κ.τ.λ. says Epic. l. l. 113. **704** *satis est* can hardly in sense apply to *pluris*: *opus est* or the like seems to be required. *una tamen sit* i.e. causa, though you are not able to determine it. **707** *una*, compared with 704 *ună*, appears to be the adjective: ut dicatur ună causa leti illius hominis: the ellipse is harsh anyhow, and it might be simpler to take *unā* as the adverb, 'that among these various causes the cause of his death may be stated'. **710** *genere ex hoc*, the whole class of causes of death

712—737: the Nile may rise from various causes: from the etesian winds blowing up the stream and stopping the waters; or from sand accumulating at the mouth; or perhaps rather from the rains at its source caused by these winds collecting the clouds there against the high mountains; or from snow melting on the lofty Ethiopian hills. **712** *in aestatem*: 875 *in lucem tremulo rarescit ab aestu*: 'every summer', 'every day': [Lucil. XXVIII 26 *Cui saepe mille imposui plagarum in diem*; Plaut. aul. 322 (316) *in nonum diem solet ire coctum* i.e. nono quoque die: see Ussing there who cites Stichus 635; Ter. eun. 540:] Hor. od. III 29 42 *in diem Dixisse*; sat. II 6 47 *in diem et horam*; Juv. VI 183 *inque diem septenis oderit horis*; Livy XXXI 29 15 *mutabilibus in diem causis*; Tac. ann. III 71 *neu saepius quam bis eundem in annum*: Lucr. has the more usual *inque dies* at least 8 times: V 274 *privas mutatur in horas.* **714** comp. Manil. III 271 *oras, Quas rigat aestivis gravidus torrentibus amnis Nilus.* *saepe*: you would expect *semper*; Bentl. in consequence thinks the v. spurious; but *saepe* seems sometimes to be used vaguely by Lucr. as if it were almost an expletive; V 430 *saepe* answers to II 1062 *semper.* **715** *Aut quia* cet.: Sen. nat. quaest. IV 2 22 *si Thaleti credis, etesiae descendenti Nilo resistunt et cursus eius acto contra ostia mari sustinent*; and so Diodorus I 38 2, who gives a very detailed account of the causes assigned. **716** both Greek and Latin lexicons give copious references to the authors who speak of these etesian winds, the name given as Lucr. says to the *aquilones* at midsummer: 730 and V 742 *etesia flabra aquilonum.* *quĭ*: see n. to II 404. *etesiaĕ esse*: 743 *Remigĭ oblitae*; Cic. orator 152 *sed Graeci viderint: nobis ne si cupiamus quidem distrahere voces conceditur...*

at Ennius semel Scipio invicte, *et quidem nos* Hoc motu radiantis etesiae in vada ponti. *hoc idem nostri saepius non tulissent, quod Graeci laudare etiam solent.* Virgil brought the bad habit somewhat more into fashion; see Wagner quaest. XI 3. **717** comp. Mela I 53 *sive quod per ea tempora flantes etesiae . . venienti obviae adverso spiritu cursum descendentis inpediunt.* **718** *Cogentes, cogunt*: see n. to I 875, and comp. Aen. VI 684 *tendentem*, 685 *tetendit.* **725** comp. Mela l. l. *aut harenis, quas cum fluctibus litori adplicant, ostia obducunt*: our verse is obscure: formerly I took *Fluct. adv.* of the river's stream met by the opposing sands; and this is possible. But now I understand it of the waves of the sea blown in by the etesian winds and therefore right against the river's current: then both in Cic. Phil. II 21 and Cato de re rust. 100, the only other passages cited for the word, *oppilo* is active, and so it may be here; the sand bars up the mouths against the opposing waves of the sea, *contra* being an adv.: if, as Lamb. says, *oppilo* is neut. here, then *ostia contra* is used as in 715. But in the passage cited for the simple *pilo*: *hastam pilans prae pondere frangit* from the Histrian war of Hostius: it is also active. **726** *ruit*: Virg. geor. I 105 in the opposite sense *cumulosque ruit male pinguis harenae*: '*ruit*, levels, whereas *ruam acervos* Hor. sat. II 5 22 means to heap up' Conington. **727** *Quo fit uti pacto* = quo pacto fit uti: comp. 204 and n. to II 1004: *fit uti* has become so entirely a single particle in force, that he here says *fit uti fiat* for *fit*, 729 *Fit uti fiant* for *fiunt*: see n. to 415. **729—734** he gives the theory of Democritus which is narrated with much clearness and fulness by Diodorus I 39, who throws great light on Lucr.: Democritus intended to refute the common opinion, which Lucr. gives last: the snows melted in summer not on the Ethiopian mountains, but at the north pole, and were carried by the etesian winds all the way up to the sources of the Nile where they were stopped and collected by the high mountains and descended in rain. **729** *caput ei*: 636 and V 270 *caput amnibus*; [Ter. Andr. 458 *illic est huic rei caput*; Livy VIII 4 5 *Romam caput Latio esse*; XXIII 10 2 *brevi caput Italiae omni Capuam fore*;] Lucr. VI 643 *Finitimis ad se convertit gentibus ora*; V 1390 *Haec animos ollis mulcebant*; 1319 *venientibus ora petebant*; IV 364 and III 129 *nobis.* **730** *et. fl. aq.* occurred V 742. **735—737** he concludes with the common theory: Sen. l. l. 17 *Anaxagoras ait ex Aethiopiae iugis solutas nives ad Nilum usque decurrere. in eadem opinione omnis vetustas fuit. hoc Aeschylus Sophocles Euripides tradunt. sed falsum esse plurimis argumentis patet*: Lucr. having never journeyed to the sources, is less positive than Seneca: comp. the opening of Eurip. Hel. and Valckenaer diatr. p. 30. **737** *Tabificis* is a common enough word, but hardly occurs elsewhere in this sense.

738—768: Avernian districts are so called because birds cannot live there: there is one at Cumae, another in the acropolis of Athens, another in Syria: the effects are quite natural, so that you need not look on them as the gates of hell. **740** *quod Averna* cet.: *quod* has here much the same force as in IV 885 *Id quod providet* and the passages quoted in n. there: 'the explanation of why they are called by the name of Averna is this': without *Averna* Lachmann's *quo* for *quod* would be very well; with it his reading is scarcely intelligible. **742** *loca venere*: the accus. after *venio*, except in the case of *domum* or the name of a town, is not common: Aen. II 742 *Quam tumulum antiquae Cereris sedemque sacratam Venimus*; 781 *terram Hesperiam venies*; and ecl. I 66. **743** *Remigĭ*: see n. to 716 *etesiae*: this licence also he employs only twice; see n. to IV 741. *Rem. pen.*: Aen. I 301 *Remigio alarum*, VI 19 *Remigium alarum*; Ov. ars II 45 *Remigium volucrum . . pinnas*: πτερύγων ἐρετμοῖσιν ἐρεσσόμενοι. **744** *profusae*: Festus p. 229 '*profusus*...alias abiectus iacens, ut Pacuvius in Teucro *Profusus gemitu* cet.' [**745** comp. Caes. b. Gall. VII 46 3 *ut natura montis ferebat*; Hirt. b. Gall. VIII 12 4 *celerius quam consuetudo fert equestris proelii.*] **747** *Is locus* cet.: there is no reason to doubt what he and Virgil say of the Avernian lake when it was surrounded by thick wood: see Servius Aen. III 442. 'No bones existed in the valley at the time I visited it, excepting of some birds who in crossing the valley had been arrested on the wing by the noxious effluvia as at the lake of Avernus of old' Prof. Daubeny quoted in Murray's hand-book for south Italy, speaking of what is supposed to be the *Ampsancti valles*: exactly the same is told of some marshes in the Carolinas surrounded with thick woods, by a traveller Bosc in the early part of this century. **750** comp. Philostr. Apollon. II 10, speaking of the Ἄορνος πέτρα near Nysa, ἐν κορυφῇ τῆς πέτρας ῥῆγμα εἶναί φασι τοὺς ὑπερπετομένους τῶν ὀρνίθων ἐπισπώμενον, ὡς Ἀθήνησί τε ἰδεῖν ἐστιν ἐν προδόμῳ τοῦ Παρθενῶνος καὶ πολλαχοῦ τῆς Φρυγῶν καὶ Λυδῶν γῆς: for such *Averna loca* or *Plutonia* or *Charonia* comp. Cic. de div. I 79 *ut et Ampsancti in Hirpinis et in Asia Plutonia quae vidimus*; Strabo p. 244; Pliny II 207. **753** *fugitant non* i.e. *non fugitant* cet., *Sed natura* cet.: comp. Cicero quoted to V 383. **754** *Pervigili* is the gen. of *pervigilium*: he alludes to the famous story told at length by Antigonus of Carystus quoted by Lamb. and Ovid met. II 542—565, how the daughters of Cecrops disobeying the orders of Pallas opened the chest in which the infant Erichthonius was shut up, how the watchful crow espied them and flew away and told it to Pallas, who in anger at the bad news expelled it and all other crows for ever from her acropolis: [see Pliny X 30; Aelian V 8; Apoll. hist. mir. VIII.] 'As to the crow, the explanation seems to be that these birds, which are seen in great numbers around the rocks of the acropolis, seldom rise to the summit' Leake Athens I p. 206: at all events no Avernian exhalations are now perceived there. To what Greek poets Lucr. refers I do not know. [But see Schneider's Callimachus II p. 98.] **755** *loci ope*: see n. to III 374 *animae*

elementa, and IV 741. *ope suapte* i.e. sua ipsius opera: Festus p. 310 '*suopte* suo ipsius, ut *meopte* meo ipsius, *tuopte* tuo ipsius': *suopte*, *suapte* are found in Plautus Cicero and others: Plaut. miles 391 appears to have *suumpte amicum*; Priscian attests *meapte*, *tuapte*, *suapte*, *nostrapte*, *vestrapte*. **756** *fertur esse videri* i.e. ut ferunt, videtur esse: *videtur esse* is almost a periphrasis for *est*, is seen, found to be, φαίνεται ὤν: so 977 *videtur*, and elsewhere. **757** *Quadripedes quoque*, as well as birds. **758** *vis ipsa*, without anything else. **759** *mactata*, i.e. haec animalia: see 188 *lata*, *extructa*, with *nubes* for antecedent; and n. to I 352. **761** *efflant*: see n. to II 1004. **762** *his reg.* i.e. in all these various places, not at the Avernian lake alone; for instance at the *Plutonia* of Cicero l. l. and *Ampsanctus*, of which Aen. VII 568 *Hic specus horrendum et saevi spiracula Ditis Monstrantur, ruptoque ingens Acheronte vorago Pestiferas aperit fauces*. **762** *ne forte*, **764** *forte*: Cic. ad Att. XV 6 has *si forte*, *ne forte* in two consecutive clauses of a sentence. **763** *post hinc*: see n. to III 529 *post inde*: Aen. VIII 546 *Post hinc ad navis graditur*. **765** *Naribus* cet.: Aelian Pliny and others relate this or similar stories; Martial XII 29 5 *Cervinus gelidum sorbet sic halitus anguem*. Creech observes that there is a manifest scoff in this illustration. **766** *ferarum*: Hyginus also applies this word to serpents, Martial VI 15 2 to a *formica*.

769—780: let me repeat that the earth has atoms of all shapes, some pleasant, some offensive to the taste, and to all the other senses. **769** *saepe ante*: especially II 398—477, and IV 522—721. **770** and **776** *figuras* are atoms: see n. to II 385. **771** *cibo quae sunt*: 1095 *quae sint morbo mortique necessest Multa volare*; [IV 1019 *Indicioque sui facti persaepe fuere*; IV 783 and V 1391 *cordi est*, *sunt*; V 539 *non est oneri*;] Virg. geor. III 511 *Mox erat hoc ipsum exitio*; Ov. her. 17 (16) 147 *Ipse malo metus est*; 167 *Fama quoque est oneri*: the double dat. is more usual, as 1229 *Hoc aliis erat exitio*, [and I 759 *veneno* (sunt) *Ipsa sibi*.] **774** *ante*: IV 633 *Nunc aliis alius qui sit cibus* cet.: he adopts the language of IV 677, where smell is spoken of, *Verum aliis alius magis est animantibus aptus Dissimilis propter formas*. **778** *iactu*: see notes 1, and comp. II 846 *Nec iaciunt ullum proprium de corpore odorem*; IV 673 *adiectus odoris* is the same thing: *naris adiectus odoris Tangat*: comp. too II 1047 *animi iactus* = iniectus. **780** *tristia*: see n. to I 944 *Tristior*: Auson. epist. 15 8 *Et quae sapore tristia*.

781—817: then many things are noxious, often fatal, either to men generally or to men in certain conditions of health; as the shade of certain trees, steam of hot water, fumes of charcoal, sulphureous exhalations, still more so those from mines. **783** *Arboribus*: Pliny XVII 89 mentions the walnut and juniper; Marullus in marg. cod. Vict. 'Virg. Iuniperi gravis umbra'. **787** *Floris odore*: Plut. sympos. III 1 p. 647 F

ἱστοροῦσι γὰρ ὅτι καὶ σκιὰ σμίλακος ἀποκτίννυσιν ἀνθρώπους ἐγκαταδαρθόντας ὅταν ὀργᾷ μάλιστα πρὸς τὴν ἄνθησιν: Dicaearchus frag. 60 in Mueller frag. hist. Graec. II p. 261 tells the same of a plant on Pelion, τοὺς δ' ἁψαμένους αὐτῆς ἀναιρεῖ τῇ ὀσμῇ. **789** *Multa* cet., **790** *Quod*: Lucr. seeks emphasis by placing many words before the introductory conjunction; as V 440 *Propter dissimilis formas variasque figuras Quod non omnia* cet.; I 751 *quae cernere non quis Extremum quod habent*: so with the relative, as I 557 *longa diei Infinita aetas anteacti temporis omnis Quod fregisset*; IV 607; VI 980: and so IV 430 *Tecta solo iungens atque omnia dextera laevis Donec in obscurum* cet. **793** describes one labouring under epilepsy or *morbus comitialis*; comp. III 487 foll.: Lachmann's treatment of this v. is quite preposterous; some diseased condition is clearly required, as a healthy person is not acted upon in the way stated. **795** *man. effl.*: Ovid met. III 39 *Effluxere urnae manibus*. **796** *si od.*: see n. to II 404. **797** *per artus* here is simply *per totum corpus*, or *membra per artus* = omnia membra; see also n. to II 271. **799** *lavabris* is to *lābris*, as *lavatrina* to *latrina*. **800** *solio*, which properly means the seat in the bath on which the bather sat, here, as often, seems to denote the whole basin which held the hot water. But in Lucretius' time it was prob. only a tub or pan for a single bather; as Celsus VI 26 5 *in solium is aquae calidae resupinus demittendus est*; I 4 *in solium non descendere*. *solium* seems synon. with *lavabrum*; though in later times the *solium* became a large *piscina* holding many bathers at once. Yet *solium* may be the *piscina* here; comp. Petron. sat. 92 *circa solium sedentibus*. **804** *membra domus*: Gronov. obs. III 5 p. 467 quotes Cic. ad Q. frat. III 1 1 *nec habere poterat adiuncta cubicula et eiusmodi membra*, and Pliny epist. II 17 9 *dormitorium membrum*: comp. also V 6 15 *multa in hac membra; atrium etiam ex more veterum*; Apul. met. III 28 *singula domus membra cingit armata factio*. But as said in notes 1, the reading is very very uncertain: I doubt whether I am right even in adopting *viri* for *vini*; for Lach. is certainly wrong in saying that *At* proves he has not passed to a new question: Lucr. like Cicero often uses *at* to introduce a fresh illustration; see the many instances given in n. to IV 414 *At conlectus*: comp. too Hor. sat. II 4 51 *Massica si caelo suppones vina sereno ...decedet odor nervis inimicus*, which will support *nervis*, perhaps *vini* as well. **805** *mactabilis* is another ἅπαξ λεγόμ.: Lach. compares Accius 421 *leto tabificabili*. **810** *Scaptensula* is the σκαπτὴ ὕλη of Macedonian Thrace: Lach. explains the strange Latin form with much probability: the *s* he supposes to be like the *s* in *silva*, and to represent an older form of the Greek ὕλη, always retained by the inhabitants of the place; the *n* then in Latin merely marks the lengthened vowel, as in *thensaurus Termensium* and the like: comp. too *totiens toties*, *vicensimus vicesimus*, and the numerous instances in which the Greeks express the Latin *-ens* by *-ης*, shewing the pronunciation of the former: Lach. then

conjectures that the short *u* is due to the Roman soldiers confounding the end of the word with one of their own diminutives. But as in the age of Lucr. a Roman soldier was incapable of making a false quantity in his own language, I am unwilling to assume his being guilty of the same offence in Greek. As we know then from Horace's *sĭlŭae*, that the *i* of *silva* was short by nature, and as in Il. E 708 and H 221 the Boeotian and therefore Aeolian Ὕλη has ῠ, the old Greek word in question may well have been σῠ́λα. *Qualis* cet. depends on *Nonne vides* of course. [**812** *colores*: Silius I 233 *redit infelix effosso concolor auro*; Stat. silv. IV 7 15 *Pallidus fossor redit erutoque concolor auro.*] **815** [iis] *Quos*: see n. to I 883. *necessis* is gen. of *necesse*; Lach. compares and amends Donatus to Ter. eun. 998, and quotes from the senatus cons. de bacchan. inscr. Lat. I 196 4 *necesus esse* i.e. necessus, the old gen. for *necessis*. **817** *prompta caeli*: 1267 *populi loca prompta*.

818—829: in the same way these Avernian spots send up a poisonous steam, so that birds on coming across it are disabled and tumble down; and when they reach the sources of it, are quite killed.—He dwells at such great length on these *Averna* because they illustrate so many of his favourite first principles; the poet as usual having to give place to the philosopher, when the two characters come into collision. **821** *Quo* = et eo, and connects *impediatur* with *Ut* of 820: see n. to V 873. **823** *derigit* is neuter and = derigit se; see n. to III 502: auctor belli Hisp. 29 *hinc derigens proxima planities aequabatur*: which is very similar to its use in Lucr.; that work too represents the homely style of a contemporary of the poet: II 198 *Derecta*; IV 609 *viis derectis*: from Ribbeck's edition I find that the mss. of Virgil are ten times in favour of *derigo*, once only of *dirigo*; Caesar's best mss. also as well as those of the auctor belli Alex. (? Hirtius) as a rule have *derectus*, which Halm restores from P in Cic. pro Caelio 38 and 42; the ancient and sole ms. of the last books of Livy too has *derectus*; the palimps. Ver. of Pliny XI 58 *derigunt*. Comp. too now Schuchardt's vulgar Lat. II p. 73, who gives many other instances of *de-* from inscriptions and old mss.; so that this was probably the only genuine ancient form and the distinctions drawn by Isidore and others between *derigo* and *dirigo* unreal and fanciful. **826** *aestum*: III 173 *mentis qui gignitur aestus*. **828** *vomenda*: Aen. IX 349 *vomit ille animam*. **829** comp. V 359 *quia nulla loci fit copia circum*.

830—839: sometimes this exhalation causes a partial void, so that the bird cannot support itself on the wing, but falls down and perishes. **836** *nixari*: see n. to III 1000; it is almost or quite a Lucretian word, and is the frequentative of *niti*, which is properly said of a bird on the wing: 834 *pinnarum nisus inanis*. **838** *iacentes*, because unable *nixari insistereque alis*; it has much the same force as 744 *molli cervice profusae*.

840—847: the water of wells is colder in summer, because they let out their seeds of heat through the earth which is then rarefied by heat: the contrary is the case in winter for the contrary reason. **845** *Frigore—concrescit*: see n. to III 20 *nix acri concreta pruina*.

848—878: the fountain by the temple of Hammon is cold by day, warm by night, not, as is absurdly said, because the sun below the earth warms it, but because the earth about it condenses at night and so squeezes into the water its seeds of heat; and then by day receives these back again.—Curtius Arrian Pliny Mela and others speak of this property of the fountain: Ovid met. XV 309 *medio tua, corniger Hammon, Unda die gelida est, ortuque obituque calescit.* Curtius IV 31 gives the fullest and most precise account. **854** and **863** *corpus aquai*: Emped. 285 ὕδατος τέρεν δέμας ἀργυφέοιο. **858** *satiare*: Cic. Arat. 364 *Cum supera sese satiavit luce*, where mss. have *sociavit*; Germanicus 588 *Siderea vix tum satiatus luce*, the words of Aratus being ὁ δ' ἐπὴν φάεος κορέσηται. **864** *roriferis* cet.: Aen. IV 351 *quotiens umentibus umbris Nox operit terras.* **868** *aqüae*: see n. to 552. **869** *dimovit* appears to have the same force as in Virg. geor. II 513 *Agricola incurvo terram dimovit aratro.* **875** *in lucem*: see n. to 712 *in aestatem*. **877** *quasi*, in the sense of 'as', is very common in Lucr. **878** *nodos*: a bold continuation of the metaphor involved in *exolvit*: Hor. epist. I 3 3 *Hebrusque nivali compede vinctus*; Petron. sat. 123 v. 188 *undarum vincula rupit*; comp. too 531 *mora quae fluvios passim refrenat euntis*.

879—905: there is also a cold fountain which ignites tow or pinewood put over it: it contains many seeds of latent fire, which rise up and set on fire this tow or wood, as flame will light a freshly extinguished wick, before actual contact.—Pliny II 228 and Mela II 43 tell this fact of a fountain at Dodona, to which Lucr. probably refers. **890** *endo*: see n. to I 82 *Indugredi*: Ennius in ann. has *Indu mari magno*. *Aradi*: Aradus or Arvad a populous island on the coast of Phoenicia: this fountain was very famous; see Strabo p. 754 for the use the inhabitants made of it; it is said to be used in the present day. **891** *scatit* in V 40 too takes a gen. **892** *multis aliis* cet.: Pliny II 227 *dulcis haustus in mari plurimis locis, ut ad Chelidonias insulas et Aradum et in Gaditano oceano*: Leake numism. Hellen. insular Greece p. 72 'opposite to the fountain [Arethusa] at the distance of about 200 yards a large submarine stream of fresh water rises in the sea, of which the Arethusa itself is apparently a branch'; Sir E. Tennent describes similar springs in Ceylon. **894** *intervomit* appears not to be found elsewhere. **896** *sem. quae*: see n. to I 15. **900** *noc. ad lum.*: Aen. VII 13 *Urit odoratum nocturna in lumina cedrum*: with Circe the *cedrus* served for fire and candle. **901** the language of Pliny l. l. is very similar, *in Dodone Iovis fons...si extinctae admoveantur* (i.e. faces) *accendit*. *ubi admoveas*: see n. to II 41 foll. **904** *imbuat*

ignis, an expressive metaphor, though less bold than 1176 *sitis arida, corpora mersans*: 896 he uses *scatere* of the seeds of fire, but they may be said to be part of the fountain. **905** *fieri quoque in illo fonte*: he means *fieri in illo quoque fonte*; see n. to v 192.

906—916: to discuss now the magnet, a stone which has the power of attracting iron, and communicating this power to a series of pieces of iron. **908** *Magneta*: Plato Ion p. 533 D ἐν τῇ λίθῳ ἣν Εὐριπίδης μὲν Μαγνῆτιν ὠνόμασεν, οἱ δὲ πολλοὶ Ἡρακλείαν: what follows is so like Lucr. that Lamb. thinks he had Plato before him. Plato however seems to misrepresent Euripides: see Hesych. and Photius s. v. Ἡρακλεία λίθος: ἡρακλεία (ἡράκλεια) λίθος was the regular Greek name for the loadstone, the older Greek writers, as Eurip., usually denoting by μαγνῆτις λίθος a quite different stone: see Theophr. π. λίθων 41, Hesych. Photius and the other lexicographers. **909** *Magnetum* of Lydia, our extant authorities unanimously declaring that the names come from the Lydian Magnesia and Heraclea: Sophocles indeed, the oldest of them, calls it the 'Lydian stone', the name usually given to the touchstone: see Hesych. s. vv. Ἡρακλεία, and Λυδικὴ λίθος σίδηρον τηλόθεν προσηγάγου. Comp. Salmas. exerc. Plin. p. 775 776, and esp. Buttmann in the Mus. d. alt. Wissensch. II p. 5—52, who makes it probable that the local derivations of both the magnet and the Heraclean stone were mere fictions and that the latter meant originally 'Hercules' stone', to denote its attractive power. Pliny XXXVI 128 names the Thessalian Magnesia as one of the districts where the loadstone was found; so that some connected the name with it perhaps. [*fit ortus*: comp. Cic. de leg. III 19 *cuius primum ortum . . inter arma civium . . procreatum vidimus*: so mss. and Halm, *procreatam* Manutius.] **916** *permananter* appears to be a ἅπαξ λεγόμ. Plato l. l. ὥστ' ἐνίοτε ὁρμαθὸς μακρὸς πάνυ σιδήρων καὶ δακτυλίων ἐξ ἀλλήλων ἤρτηται· πᾶσι δὲ τούτοις ἐξ ἐκείνης τῆς λίθου ἡ δύναμις ἀνήρτηται.

917—920: but many points have to be cleared up, before we come to the actual question. **917** *Hoc genus*: comp. *id genus, quod genus, omne genus.* *multa* cet.: he dwells on the magnet at what appears so disproportionate a length, because the phenomena seem to him to illustrate so many of his favourite first principles. The elaborate criticism in Galen de nat. facult. I 14 of Epicurus' theory of the magnet, extending over many pages, proves that the latter must have dwelt on the subject at as great length as Lucr. does, and that he explained the phenomena in a similar manner. **919** *lon. amb.*: 1081 *Nec tibi tam longis opus est ambagibus*; Aen. I 341 *longae Ambages*; geor. II 46 *Atque per ambages et longa exorsa*; Ov. met. IV 476 *non longis opus est ambagibus.*

921—935: we have said already that particles are constantly streaming from all things, which affect in various ways all the senses. **923—935** are with scarcely any difference a repetition of IV 217—229.

936—958: let me repeat that all things in being are of rare and porous bodies, so that particles can and do pass through them in all directions: this is proved by the whole of nature. **936** *rep. Comm.*: see n. to I 418. **937** *primo*, 329 foll. **942** *speluncis* cet.: I 348 *In saxis ac speluncis permanat aquarum Liquidus umor et uberibus flent omnia guttis*: Wak. compares Lucan IV 301 *Antra nec exiguo stillant sudantia rore.* **944** *Manat* cet.: Enn. ann. 399 *Tum timido manat ex omni corpore sudor*; Aen. III 175 *Tum gelidus toto manabat corpore sudor.* **950** *cum poc.* cet.: I 495 *retinentes pocula rite*; III 912 *tenentque Pocula saepe homines.* **951** *dissaepta*: the subst. hardly occurs elsewhere, at least in this sense, though the verb is not uncommon. **952** *vapos*: Nonius p. 487 'vapor et vapos et timor et timos et labor et labos ita sunt ut color et colos. Lucretius lib. VI *Pervolitant, permanat odos frigusque vaposque*': Augustus in his res gestae still keeps *honos*; Livy XXVIII 26 14 has *colos*: see too Neue I p. 167 foll. **954** *Galli lorica*: Lach. cites Varro de ling. Lat. V 116 *lorica, quod e loris de corio crudo faciebant. postea subcidit Galli e ferro sub id vocabulum, ex anulis, fere iam tunica*; Tac. ann. III 43 *quibus more gentico continuum ferri tegumen*: this correction of Lach. seems to me certain; Lucr. had doubtless seen or heard how in sieges fire in various shapes had taken effect on such steel cuirasses. *coercet*: in IV 647, 657 and Livy II 58 7 *nec pudor nec metus coercebat*, it is used absolutely as here, where *qua* defines the object. **955 956**: by the simple transposition of these vss. I flatter myself I have made this passage clear: et cum tempestas in terra caeloque coorta est, cumque simul cum ea morbida vis extrinsecus insinuatur, tum haec tempestas et haec vis, terra coortae in caelum remotae, caelo coortae in terram remotae, iura facessunt. My reading is illustrated and confirmed by 1098 *Atque ea vis omnis morborum pestilitasque Aut extrinsecus ut nubes nebulaeque superne Per caelum veniunt aut* cet.: in these *tempestates* are the *nubes nebulaeque* which bring the *morbida vis*; comp. too 1119—1124, and 1141 foll. **956** as said in notes 1, though the mss. are in favour of *iure*, I have returned to *iura*, admonished that *facesso* seems to have the sense of 'to be off' only as an imperative, or quasi imperative: Plautus' play on the two meanings, rudens 1061, well illustrates this: *ego opinor rem facesso.—si quidem Sis pudicus, hinc facesse*: I find, it is true, *facesso, facessit, facessunt, facesset*, one or other, at least a dozen times with this sense in the metamorph. of Apuleius; but he, an ape of the older writers, probably generalised from the instances of the imperative he found in them.

959—978: again particles emitted from bodies act very differently on different things: fire hardens one thing, melts another; and so does water; what is pleasant to one creature is hateful to another. **962** *facit are*: IV 28 *ordia prima*: Varro de re rust. I 41 2 has *facit putre*; he also uses *consue quoque faciunt, excande me fecerunt, perferve ita fit*;

Cato has *ferre bene facito*: Haupt in Hermes I p. 403 justly says that Sen. de beata vita 26 2 is hardly Latin unless you read *obstupe faciant*, not *obstupefaciant*. **965** *posta*: III 871 *posto*, 857 and I 1059 *posta*; VI 999 *praeposta*: he also has *impostus dispostus* and *oppostus*, as well as *repostus* which the metre requires. **968** *condurat* seems not to be found elsewhere. *ab igni*: II 99 *vexantur ab ictu*: this use of *ab*, 'after', 'just after', is common in Ovid, as met. III 273; IV 329; 465; XIV 352; ars III 226; her. 18 (17) 69; ex Ponto III 4 73; IV 5 26; trist. IV 10 122 *ab exequiis*, an imitation of Prop. IV (III) 1 24: in Livy I have noted down very many expressions such as these, *ab seriis rebus ludicrum fecit*; *ab his praeceptis, ab hoc sermone, ab hac oratione, ab hac voce, ab hac contione digressi, dimissi*; *a primo colloquio extemplo missi sunt*. **971** comp. Odyss. ι 359 Ἀλλὰ τόδ' ἀμβροσίης καὶ νέκταρός ἐστιν ἀπορρώξ. *Effluat* I now take as said of the oleaster: Pers. III 20 *effluis amens*; where Jahn well compares Petron. sat. 71 *ne* (i.e. amphorae) *effluant vinum*; Claud. cons. Probi et Ol. I 51 *Quantum stagna Tagi...Effluxere decus*, an imitation no doubt of older writers; and observes that this and similar words, *mano* espec., are said of the thing out of which a fluid comes as well as of the fluid itself, with or without an accus.: Pliny XIV 122 *arborum suco manantium*. *vero*=vere, is common in Plautus: in Jahn's Jahrb. 91 p. 48 are cited Amph. 964, 678, capt. 567, Pseud. 1191, trin. 210, merc. 685, Cas. IV 2 11, truc. II 2 47: Sall. hist. fr. IV 11 mss. have *vero an*; Livy X 23 5 *vero gloriaretur*, where Madvig reads *ex vero*. **973** *amarac.*: see n. to II 847: Gellius praef. 19 *vetus adagium est, nihil cum fidibus graculo, nihil cum amaracino sui*: is it a fact that perfumes poison swine, or did the proverb suggest the notion? **977** *videtur*, φαίνεται ὤν, not εἶναι: so 756.

979—997: once more, the pores of things differ, as well as the particles which things emit; so that by different kinds of pores the different senses receive each its own object: thus too one thing will pass through a metal, another through wood, and so on; and one thing will pass more quickly than another through the same pore or opening. **979** *quam, prius*: see n. to III 973. **986** *alio* i.e. in alium sensum: II 683 *Nidor enim penetrat qua fucus non it in artus, Fucus item sorsum, sorsum sapor insinuatur Sensibus*. **991** *lignis, Argento, vitro* =per ligna, cet.: '*lignis*, de resina lignis manante accipiendum' Lach.: to me it seems to be used more generally. **994** *transmittere* is neuter. **996** *ante*, i.e. 981 foll.

998—1041: and now we can easily explain the magnet's attraction: particles streaming from it cause a void between it and the iron; these particles in a united mass fill the void, and as the particles of iron are very closely packed, the whole ring must follow, when a certain number have thus advanced: this takes place on all sides, as particles stream from the magnet all round, if not by their own motion, yet by impact: as there is a void too on one side of the iron, the air on the other side helps to push it on as well as the air in motion within the ring. **998** *confirmata, locata, praeposta, parata*, a curious agglomeration of participles, though *praeposta* seems to have almost the force of a subst., 'points laid down beforehand'. **1003** *sive*: comp. I 955 *Seu locus*. **1009** *primoribus*=primis: see Forc. **1011** *horror*: II 410 *serrae stridentis acerbum Horrorem*: *horror* in these two places=quod facit horrorem. **1012** *ibus*: II 88 *a tergo ibus obstet*: here, as there, the obsolete form has occasioned a corruption: *ex elem.* depends on *corpora*, *e ferro* on *coorta*; though Lucr. does not avoid two prepositions in the same clause: IV 694 *Ex alto primum quia vix emittitur ex re*: see n. to I 412: [comp. also Caes. b. Gall. I 26 3 *ad multam noctem etiam ad impedimenta pugnatum est*; II 25 3 *cum pro se quisque in conspectu imperatoris etiam in extremis suis rebus operam navare cuperet*; III 29 3 *in Aulercis.. in hibernis conlocavit*; III 20 4 *quas in convalle in insidiis conlocaverant*; IV 1 4 *pagos.. ex quibus quotannis singula milia armatorum bellandi causa ex finibus educunt*; VI 18 3 *in publico in conspectu patris adsistere*; b. civ. III 101 6 *qui ex veteribus legionibus erant relicti praesidio navibus ex numero aegrorum*; auctor bell. Afr. 8 5 *cum civibus in patria in suis fortunis esse incolumes*; 19 1 *ex adversariis perfugere plures ex omni genere hominum*; 42 3 *in acie in cornu dextro ac sinistro ex iniquiore loco pugnare*: the repetition seems a peculiarity of this writer's homely style.] **1016** *compagibus*: 1071 *Quam laxare queant compages taurea vincla*. **1017** *unde cumque* appears here to have the sense of *ubicumque*. **1020** *nec ipsa* cet. i.e. nam ipsa quidem sponte sua non possunt. **1022** *quare—iuvatur*: Lucr. is fond of parenthetical clauses like this: comp. III 1068, 790 and V 134, in all which passages, as here, the text is made clear by this simple method without any change whatever: such parentheses are a very marked feature of Livy's style. [*id...Haec quoque res*: Catull. 76 15 *Una salus haec est, hoc est tibi pervincendum, Hoc facias sive id non pote sive pote.*] **1023** *adiumento* implies something which adds its assistance to the forces of the thing itself. [**1025** *vacuatus*: Mart. XI 5 6 *Elysium liceat si vacuare nemus.*] **1027** *prŏpellat*: IV 195 *a tergo quae provehat atque prŏpellat*, perhaps the only examples of this quantity: 1029 *prōpellat*, as elsewhere. **1032** *Parvas* here appears to be emphatical, 'to the very smallest parts'. **1036** *rebus circumd.*: I 87 *circumdata comptus*, a different constr.; see n. to I 38. *adpositus*: Sen. nat. quaest. II 6 *aer continuus terrae est et sic adpositus ut statim ibi futurus sit unde illa discesserit*. **1040** *quo* cet.: a relative clause coupled with *et partem in vacuam*, as so often in Lucr. and the best writers: comp. 1015 *Quod facit, et sequitur*; II 140, and some of the examples in n. to I 718. **1041** *con. sum.*: 326 *magnum conamen sumit eundi*.

1042—1064: but if brass come between the magnet and the iron,

then the iron is repelled, not attracted, because the stream of particles from the brass first fills the pores of the iron; those from the magnet follow, and finding the iron already occupied, beat on it and repel it: other things are not thus repelled like iron for various reasons; gold is too heavy, wood too porous, iron is the due mean. **1044** *Samothracia* seem to be mentioned by Pliny XXXIII 23, a most obscure passage: Isidore orig. XIX 32 5 says that the Samothracian ring is *aureus quidem, sed capitulo ferreo*: whether this is meant by Lucr. I cannot say. **1048** *Aere interp.* cet.: Lucr. is here completely mistaken from too hasty an induction: neither the attractive nor the repulsive power of a magnet is sensibly affected by the interposition of any body which is not sensibly magnetical, be it metal glass wood paper or whatever else: nay the magnet works equally in a vacuum, the absence or presence of air making no difference: this by the way overthrows the poet's argument 1022—1041, where he brings in his favourite air to assist in explaining the attraction between the loadstone and iron. But if Lucr. has failed in solving the mystery, no one seems to have succeeded. **1050** *Praecepit*: 803 *nisi aquam praecepimus ante.* **1053** *fluctu* is the same as the *aestus* of 1051 1056 and 1059, and the *flumine* of 1064. **1054** *respuit* and **1055** *resorbet* appear to be used in designed contrast. **1056—1064** I have joined with what precedes, as manifestly belonging to the same argument, the repulsive power of the magnet through *aes*, and have ended the paragraph with 1064: comp. 1063 *Aeris ubi* cet.: this is shewn too by 1057 *impellere*, 1060 *impellier*, which imply driving from, not drawing to: the purpose of these lines is plainly this: he has shewn above why iron is attracted and not other metals; if now it is repelled in the way stated, it might be thought that other substances which cannot be attracted, would a fortiori be repelled where iron is repelled: this inference he attempts to obviate in these vss. by asserting that gold is too heavy, wood too porous. **1057** *impellere* to push on and so repel. **1058** *stant*: Lach. p. 85 compares II 181 and V 199 *tanta stat praedita culpa*, where *stat*=est; but here *stant* seems to have its proper force of standing still, the opposite of *impelli.* **1059** *cum*: see n. to I 755. **1063** *Aeris* cet. refers back of course to 1044 foll. and 1048 *Aere interposito* cet.: Lachmann's arrangement of the paragraphs quite obscures this connexion, which some I see have absurdly misapprehended, corrupting the text by unmeaning changes. **1064** *flumine*, as 1053 *fluctu.*

1065—1089: the fact that only iron is attracted by the loadstone need not excite wonder: many things can be joined together only by some one substance, stones and woods and various metals; then some liquids will mix, others will not: in all cases of mixture and adhesion the cavities of one substance must mutually come in contact with and fit the solid parts of the other; sometimes too the union is like that of hooks and eyes, as indeed seems to be the case with this stone and iron.

1065 *haec*, such cases of attraction; referring not to the exceptional case which immediately precedes, but to 998—1041. **1067** *singlariter*: though no other instance is known of this contraction, it must be genuine; and does not seem harsher than 1088 *coplata*, which appears only in Lucr., or than *perviglanda striglibus frigdaria* and the like: [comp. too lex colon. Genetivae c. 65 (ephem. epigraph. vol. 3 p. 95) 'figlinas teglarias maiores tegularum CCC tegulariumve.'] Lucr. three times has *aqüa*, a form probably peculiar to him and found too only in this book. It is clear that a word of the precise meaning of *singulariter* or *singillatim* is called for by the context; not *simul uniter apta* or the like. **1068** *colescere*: see n. to V 342. **1069** *taurino*: Pliny XXVIII 236 *glutinum praestantissimum fit ex auribus taurorum et genitalibus.* **1072** *Vit. lat.*: V 14 *liquoris Vitigeni laticem.* *aqüai*: see 552. *audent*=non dubitant: 1191 *succedere frigus Non dubitabat*: or else =volunt: see n. to IV 508 *ausis.* **1078** *res una*, hence called *chrysocolla* or gold-solder. **1080** *iam quam multa*: I 104 *quam multa tibi iam fingere possunt Somnia.* **1081** comp. 919: the one seems almost to be written with reference to the other. [**1083** comp. Eurip. frag. 364 v. 5 (Nauck) Βραχεῖ δὲ μύθῳ πολλὰ συλλαβὼν ἐρῶ.] **1084** *Quorum*, **1086** *iunctura haec*: strict syntax would require *horum*, as Lamb. has written: perhaps the turn of expression has been caused by 1085 *Ut cava* cet.: Prop. II 1 55 *Una meos quoniam praedata est femina sensus, Ex hac ducentur funera nostra domo*; Cic. ad Att. VIII 14 1 *qua expectatione*; Caesar ib. IX 16 3 *hanc gratiam*=huius rei gratiam; de fin. II 66 *hic dolor*: see Madvig there: Ov. met. IV 431 *cognata exempla*, harshly for *cognatarum exempla*; [Caes. b. civ. III 60 3 *quo pudore*, where see Kraner (Hofmann): see too Herzberg Prop. vol. III p. 241 and 513.] **1085** *haec* cet. i.e. haec cava illius plenis illaque cava huius plenis: for the position of *que* see n. to II 1050. **1087** *plicata*: the particip. seems to be very rare: Sen. epist. 95 2 mss. have *historiam...artissime plicatam.* **1088** *coplata*: see n. to 1067 *singlariter.* **1089** after dwelling at inordinate length on the early parts of this question, 919 *Et nimium longis ambagibus est adeundum*, he hurries on at the end, 1081 *Nec tibi tam longis opus est ambagibus*, and finishes abruptly, as if he felt, what is indeed the truth, that he had after all quite failed in clearing up the mystery.

1090—1137: now to explain the cause of diseases: many particles, both salutary and noxious, are ever flying about; sometimes the latter are able to corrupt the air; then comes pestilence, either in clouds and vapours, or out of the corrupted earth: it is seen what effects change of climate has on men, and how much climates differ, and how particular diseases infest particular countries; thus a strange atmosphere can come to us in mists and vapours and corrupt our air, and fall on the water we drink or the food we and other creatures eat, or make us inhale infec-

tion: thus it comes to the same thing whether the bad atmosphere travels to us or we travel to it.—Isid. de nat. rer. 39 2 imitates this paragraph. **1094** *supra*, 771 foll. **1095** *quae sint morbo mortique*: 771 *Multa, cibo quae sunt*; see n. there. **1098, 1125** and **1132** *pestilitas* is another Lucretian word, *pestilentia* not suiting the metre. **1099** *extrinsecus* cet.: 956 *Morbida visque simul cum extrinsecus insinuatur*; see n. there. **1101** *ubi putorem* cet.: II 872 *putorem cum sibi nacta est Intempestivis ex imbribus umida tellus*; 928 *terram Intempestivos quom putor cepit ob imbris*: here he adds *solibus*, so powerful in producing such epidemics. **1103** comp. Ov. trist. III 3 7 *Nec caelum patior nec aquis adsuevimus istis*: but Pliny paneg. 15 *diversam aquarum caelique temperiem ut patrios fontes patriumque sidus ferre consuesti.* **1104** *Temptari*, a technical word for the attack of disease: comp. 1116 *temptantur*, 1137 *temptare.* **1105** *disc. res*: II 1018 *verum positura discrepitant res*: the little word *res* is made to perform a legion of functions. **1106** *quid putamus*: for the indic. comp. Juv. IV 28 *Quales tunc epulas ipsum gluttisse putamus Induperatorem?* and Mayor there, and ib. 130, where he cites Pliny epist. IV 22 6, and Madvig opusc. II p. 39 foll.: comp. too III 950 *Quid respondemus?*; Pliny epist. IV 25 3 *quid hunc putamus domi facere, qui* cet.; [Petron. 56 *quid putamus difficillimum esse artificium? ego puto medicum et nummularium*; Mart. VIII 47 2 *unum quis putat esse caput?*:] similar in principle is the use of *quid putas? quid credis?* and the like. *Brittanni*: *Brittannis* has no sense; for *caelum* would then be quite indefinite, and *quod in Aegypto est* must refer to *Brittannis*: the length of the first syll. appears unexampled; whereas that is the usual quantity of *Brĭto.* **1107** *claudicat* seems to mean, is depressed, lies low, and so leans over like a limping man: comp. Virg. geor. I 240 *Mundus, ut ad Scythiam Riphaeasque arduus arces Consurgit, premitur Libyae devexus in austros.* Upper Egypt and Britain seem almost proverbial in this matter: Cleomedes I p. 42 παρὰ μὲν Συηνίταις καὶ Αἰθίοψιν ἐλάχιστον φαίνεται τὸ τοῦ πόλου ὕψος, μέγιστον δὲ ἐν Βρεταννοῖς: *claudicat* may have the same force as IV 436 *clauda*; see n. there. **1108** *et* (i.e. id quod est) *Gadibus.* **1109** comp. 722 *Inter nigra virum percocto saecla colore.* **1111** *Quat. a ventis*: Virg. geor. IV 298 *Quattuor a ventis*; the usual force of *a ventis* is, on the side exposed to the wind; as V 754 *a terris*, on the side towards the earth: here *a ventis, partibus* are rather used as *a fronte, a tergo*: Livy XXVII 48 15 *ita ex omnibus partibus, ab fronte, ab latere, ab tergo trucidantur*; it means therefore in the regions where these winds and quarters of heaven are. **1114** Seren. Samon. 133, quoted by Marullus in marg. Victor., *Est elephas morbus tristi quoque nomine dirus.* *elephas* or *elephantiasis*, for both names are used by Galen, is described by him in various places and fully by Celsus III 25 and others; its name is derived from the condition to which it reduces the skin: Kraus medicin. Lex. says that Lucretius' limitation of its range is true of real elephantiasis at the present day. **1116** *Atthide* is used for *Attica* more than once by Mela. *gressus*: is this gout, or the τὰν τοῖσιν ἀντικνημίοις ἑλκύδρια of Aristophanes? the expression would seem to point to gout; but Virg. geor. II 94 *Temptatura pedes* and Sen. epist. 83 at end *temptantur pedes* are said of the reeling of drunkenness. **1119** *quod—Commovet* must apparently be taken together, as *est* cannot well be understood in Lucr.; and then *caelum*, as well as *aer*, is nom. to *coepit*: the sentence would of course be simpler, if *est* could be understood, or if we read *alienumst.* **1121** comp. 1099. **1122** *immutare*, neut.: see n. to III 502. *coactat*; 1161 *coactans*: a Lucretian word. **1126** *ipsas* seems only to distinguish *fruges* from *aquas*; at all events *aquas* and *fruges* seem to be exactly coordinate, and the one to have no preeminence over the other: comp. 658 *arripit acer Saepe dolor dentes, oculos invadit in ipsos.* **1127** *hom. pastus pec. cibatus*: pecudum pastus hominumque cibatus would be more usual. **1128** *aere in ipso*, i.e. intus in aere: see n. to IV 736. **1132** *pigris* I take to be a mere poetical epithet; not to apply to the languor produced by disease: Sen. Oed. 133 clearly refers to it: *Prima vis tardas tetigit bidentes.* *bal.*: see n. to II 369 *Balantum pecudes.* **1134** *amictum* is a bold, but most expressive metaphor, as the atmosphere wraps us round like a garment: *caeli tegmen*, as we have seen, is much more common. **1135** *cŏruptum* is defended by Lucilius' *ore cŏrupto*, 'dempsit enim unam litteram per metaplasmum *r*' Consentius p. 400 K.; for whether Lucilius so writes seriously or satirically, the *cŏ* must have been in use; and Isid. l. l. evidently read *corruptum* in Lucr.: 'ita etiam aer corruptus ex aliis caeli partibus veniens cet.'

1138—1251: a plague thus engendered once devastated Athens: a large portion of the people were attacked by it; many of them after every form of bodily and mental suffering died in a few days; others later from the subsequent effects; others escaped, often with the loss of some member; medicine was of no avail; even friends and relatives frightened by the infection often deserted the sick.—The poet wishing to illustrate what he has laid down as the cause of disease, concludes his poem with this description which is an imitation, in many parts a close translation, of Thucydides II 47—54. One would infer from the words of Lucr. that he had no practical or scientific knowledge of any such like form of disease: he is content to take on trust whatever the historian says and, as we shall see, more than once misapprehends or misinterprets his words. I have looked into many professional accounts of this famous plague: the writers almost without exception praise Thucydides' accuracy and precision, and yet differ most strangely in the conclusions they draw from his words: physicians, English French or German, after examining the symptoms have decided that it was each of the following maladies, typhus scarlet putrid yellow camp hospital jail fever, scarlatina maligna,

the black death, erysipelas, smallpox, the oriental plague, some wholly extinct form of disease: each succeeding writer at least throws doubts on his predecessors' diagnosis. Lucretius' copy must manifestly be even more vague and inconclusive. The truth is that having laid down his general principles of disease and vindicated his philosophy, he seeks now to satisfy his poetical feeling by a powerful and pathetical description which he has plainly left in an unfinished state. He has been imitated in turn by Virgil geor. III 478—566, closely by Ovid met. VII 523—613, by Seneca Oed. 110—201, by Livy more than once, and by others.

1138 *mortifer aestus* has no reference I think to *Haec*: *Haec ratio* is the law of diseases just mentioned, which at this time caused a *mortifer aestus*; so that Lachmann's objection 'quis enim has res diversissimas coniungat, *haec ratio et mortifer aestus morborum*' has no force: in fact the v. is a paraphrase of 1098 *ea vis omnis morborum pestilitasque*; comp. too 1090 *ratio quae sit morbis* cet.: and for the expression 830 *vis haec atque aestus Averni*. The first words of Virgil's description *Hic quondam morbo* are evidently suggested by Lucr. and it is not unlikely that the *aestu* of 479, used in a different sense, is a reminiscence of our *aestus*; and it is nearly certain that Ovid l. l. 529 *et ignavos inclusit nubibus aestus* comes from Lucr. when we recollect the mode in which he makes pestilence approach, 1099 *ut nubes nebulaeque*, 1121 *Ut nebula ac nubes*. *aestus* has essentially the same force as in 1049, 1051, 1056, and elsewhere, i.e. a copious emanation of particles: dirae 23 *Mutent pestiferos aestus*. **1139** *fun. red.* i.e. funestavit, morte polluit: Virgil l. l. 481 *Corrupitque lacus, infecit pabula tabo*, the rhythm is evidently modelled on Lucr. as Conington has pointed out; comp. n. to v 202: Livy III 32 2 *vastati agri sunt, urbs assiduis exhausta funeribus*. *Vast. vias*: Il. E 642 χήρωσε δ' ἀγυιάς. *exh. civ. ur.*: Aen. VIII 571 *tam multis viduasset civibus urbem*; Stat. sil. III 5 73 quoted by Wak. has the very words of Lucr. **1141—1143** Lucr. adapts his description to his general theory; comp. especially 1119 *ubi se caelum quod nobis forte alienum Commovet* cet.: the strange atmosphere of Egypt put itself in motion, travelled gradually over much sea and air and at last arrived at Athens: Thuc. says no such thing: with his usual caution he tells us that it began, ὡς λέγεται, in Aethiopia, and descended to Egypt and Persia; and suddenly broke out in Athens beginning with the Piraeus; so that it is possible a ship carried it direct from Egypt. **1141** *veniens, ortus, permensus*: see notes 1 and 2 to v 692 693; and 998 *confirmata atque locata...praeposta parata*: Lach. plays sad havoc with the participles of Lucr. **1143** *Incubuit*: Hor. od. I 3 30 *nova febrium Terris incubuit cohors*; Thuc. l. l. 48 2 has ἐνέπεσε, Ovid l. l. 524 *Incidit*. **1144** *cat. dab.*: Virgil l. l. 556 *Iamque catervatim dat stragem*. **1145** *Principio* cet.: Thuc. 49 2 πρῶτον μὲν τῆς κεφαλῆς θέρμαι ἰσχυραί κ.τ.λ.: θέρμαι and *fervore* appear to have nothing special in them, as Arnold seems to imply of the former, but to denote heat generally. *gerebant* simply in the sense of having is common in the best writers: see n. to III 1049: and is often used of the parts of the body: Ov. met. II 585 *neque iam palmas nec pectora nuda gerebam*; v 161 *Tutaque terga gerens*. **1146** *suf. luce* expresses the φλόγωσις of Thuc. and means I presume the glare of inflammation: Sen. Herc. Oet. 1405 *igne suffuso genae*. **1149** *an. int.*: Hor. ars 111 *Post effert animi motus interprete lingua*. **1151** *Inde ubi* cet.: it cannot fairly be questioned that in these vss. Lucr. misrepresents Thuc. who says that the disease first attacked the head, then the throat and tongue, then l. l. ἐν οὐ πολλῷ χρόνῳ κατέβαινεν ἐς τὰ στήθη ὁ πόνος, and then always descending, ὁπότε ἐς τὴν καρδίαν στηρίξαι, ἀνέστρεφέ τε αὐτὴν καὶ ἀποκαθάρσεις χολῆς πᾶσαι ὅσαι ὑπὸ ἰατρῶν ὠνομασμέναι εἰσὶν ἐπῄεσαν, i.e. as all the commentators of Thuc. explain it, when it got below the breast and reached the stomach, discharges of bile of every sort took place; it being expressly stated on good authority that by καρδία the ancients, particularly Hippocrates and Thuc., denoted τὸ στόμα τῆς γαστρός. But Lucr. has evidently taken καρδία in its usual sense: such a mistake was not unlikely to occur; but it has caused him sadly to misrepresent the case: he makes the disease not merely descend into the breast, but wholly fill the breast, and stream together into the sad heart, and thus at the very commencement of its course force all the fastnesses of life, though the patients afterwards go through many stages of suffering and live at least eight or nine days: Thuc. says some sentences later διεξῄει γὰρ διὰ παντὸς τοῦ σώματος ἄνωθεν ἀρξάμενον τὸ ἐν τῇ κεφαλῇ πρῶτον ἱδρυθὲν κακόν. This error of Lucr. was pointed out by Victorius three centuries ago in his variae lectiones XXVIII 17 and more fully in a letter to Hieronymus Mercurialis published by Passow in 1832: Lamb. in vain asserts that Lucr. here uses *cor* for *stomachus* after the Greeks; his wide departure from Thuc. and the whole turn of his language prove that *cor* here, as elsewhere, means the seat of life; nor is there the least authority for supposing that *cor* could have any other meaning. **1153** *vit. cl.*: I 415 *vitai claustra resolvat*; see n. to I 71. **1155** *perolent* seems not to occur elsewhere. **1157** *leti lim.*: 1208 *metuentes limina leti*; II 960 *leti iam limine ab ipso*.

1158 1159: Thuc. adds to the words last quoted καὶ αὗται μετὰ ταλαιπωρίας μεγάλης, referring to the great distress caused by the violent vomitings: Lucr., having as we saw quite misrepresented the rest of the sentence, would not understand these last words: he has therefore given quite a different turn to the words of Thuc. in these two vss.; he certainly does not refer to the sentence here quoted by Wak.: his translation of it comes later, as we shall see. **1158** *anxius angor* occurred above III 993. **1160** *Singultus frequens* represents Thucydides' λύγξ κενή, which is commonly explained to be an empty retching, where nothing is brought up. **1161** *Corripere* 'to draw together in spasm':

comp. v 1223 *Corripiunt membra*; and iv 83. *coactans*, as 1122: coactans eos corrip., dissoluebat et fatigabat eos, vel ante defessos. **1163** and **1170** *posses*: see n. to i 327 *possis*; and comp. the use of *crederes* and the like. **1167** *ut est* cet.: 'ut est sacer ignis, dum per membra diditur' Lach. *sacer ignis*: see n. to 660: comp. Virg. geor. iii 566 and Sen. Oed. 187. **1172** *partim* = nonnulli; see n. to v 1143: 1211 *partim* = 1210 *nonnulli*. **1175** *ipso* means straight with mouth, with mouth rather than or before any other part: comp. Livy xxi 58 3 *vento mixtus imber cum ferretur in ipsa ora*; xxii 46 9 *pulvere in ipsa ora volvendo*; comp. too Lucr. himself iv 651 *in ore ipsoque palato*; 1044 and vi 1207 *partis genitalis corporis ipsas*. **1176** *Insedabiliter* appears not to be found elsewhere: adverbs of this form seem to have been common in popular language: the scribblings on the walls of Pompeii shew not only *amabiliter*, but also *fratrabiliter incurabiliter irrumabiliter festinabiliter* and one in n. 2138. *sitis, mersans*: a bold but expressive metaphor: thirst so drenches the body, that no after drenching of water can overcome it: comp. Stat. Achill. i 303 *totisque novum bibit ossibus ignem*. As A and Niccoli have *mersans* and the Vienna fragment has *messans*, the *inerrans* of B is plainly a mere clerical error, and will not do to build conjectures upon. **1177** *ἐν τῷ ὁμοίῳ καθειστήκει τό τε πλέον καὶ ἔλασσον πότον*. **1179** *mussabat*: another fine metaphor, muttering under breath, as not knowing what to prescribe and therefore not daring to speak out; see Conington geor. iii 550: Pliny epist. vii 1 5, being ill of fever, says 'cum mussantes medicos repente vidissem'; from which use Lucr. may have taken his metaphor: see Nonius and Donatus cited by Wagner aulul. 131. **1180** *patentia, ardentia, expertia*: see notes 1 and 2 to v 692 693. *ardentia morbis Lumina*, **1186** *Creber spiritus* cet., **1203** *Corruptus sanguis* cet.: Virg. l. l. 504 *Sin in processu coepit crudescere morbus, Tum vero ardentes oculi atque attractus ab alto Spiritus...it naribus ater Sanguis*: this would serve to defend *ardentia*, if it needs defence: *morbis* seems to mean each with his own disease: but with 1180 1181 comp. Ovid met. vi 246 *simul suprema iacentes Lumina versarunt, animam simul exhalarunt*; vii 579 *Lassaque versantes supremo lumina motu*; and v 134 *Singultantem animam et versantem lumina vidit*: which might seem in favour of Lachmann's subtle and possibly true emendation: the peculiar rolling of the eyes before death is a very marked symptom. This symptom and most of those which follow down to 1195 are not found in Thuc.: they appear, most of them at all events, to be derived from the writings of Hippocrates which Lucr. must have been well acquainted with; and not to have any special reference to this plague: Lucr. indeed seems to forget for the time that he is describing the gradual progress of a disease in which some died and others recovered as is told farther on; and to think only of drawing a moving picture of the signs of coming death.

1183 *Perturbata* cet.: *παραφροσύνη* in various forms is mentioned by Hippocrates as *θανάσιμον*. *animi mens*: see n. to iii 615. **1184** *Triste sup.* cet.: Hippocr. prorrhet. i 49 mentions the *προσώπου τὸ λίην σκυθρωπόν* as a very bad symptom. **1185** so Hippocr. praenot. Coac. 193 *βόμβος ἐν ὀξέσι καὶ ἦχος ἐν ὠσὶ θανάσιμον*. **1186** Hippocr. progn. 8 *μέγα δὲ ἀναπνεόμενον πνεῦμα καὶ διὰ πολλοῦ χρόνου παραφροσύνην δηλοῖ*. **1187** *Sudoris...per collum*: Hippocr. progn. 9 mentions sweats on the head and neck only as very bad, and adds *οἱ δὲ κεγχροειδέες καὶ μοῦνον περὶ τὸν τράχηλον γινόμενοι πονηροί*: the latest editor Ermerins omits these words because Galen says some mss. want them; Lucr. was less critical. **1188** *croci* cet.: Hippocr. l. l. 24 *τό τε γὰρ ξανθὸν πτύελον ἄκρητον ἐὸν κινδυνῶδες*, and elsewhere speaks of saltness of spittle as a dangerous symptom. **1190** *In manibus* cet.: Hippocr. l. l. 7 mentions at length nervous twitchings of the hands, *κροκίδας ἀπὸ τῶν ἱματίων ἀποτιλλούσας*, and the like, as deadly symptoms; but this 'fumbling with the sheets and playing with flowers' and the like have ever been noted as sure signs of death. *trahere*: see n. to 595 *movere*: Lach. says the *trahere* for *trahi* is admissible, when the act is involuntary and there is no external and *apparent* cause for the contraction. *tremere artus*: this shivering Hippocr. mentions as a bad sign in fever. **1191** 'they were as cold as any stone; then I felt to his knees, and so upward, and all was cold as any stone'. **1192** *Non dub.*: iv 188 *Non dubitant transire*; vi 1072 *aquai fontibus audent Misceri*. *item ad supremum* cet.: these signs of approaching death seem almost translated from Hippocr. progn. 2 *ῥὶς ὀξεῖα, ὀφθαλμοὶ κοῖλοι, κρόταφοι ξυμπεπτωκότες...καὶ τὸ δέρμα τὸ περὶ τὸ μέτωπον σκληρόν τε καὶ περιτεταμένον καὶ καρφαλέον ἐόν*: these words recur little changed in the praenot. Coac.: Celsus ii 6 translates him thus '*ad ultima vero iam ventum esse testantur nares acutae, collapsa tempora, oculi concavi,...cutis circa frontem dura et intenta*. **1193** *nasi acumen*: 'his nose was as sharp as a pen': Afranius has *primoribus naribus*, Lucilius *primoribu' partibu' naris* and *primores unguis* (Mueller p. 221). **1195** *in ore trucei rictum*, another well-marked symptom: 2 Hen. VI 3 3 24 *See how the pangs of death do make him grin*; par. lost ii 845 *and death Grinnd horrible a gastly smile*; [Sen. Herc. Oet. 1172 *non truci rictu gigans*.] **1196** *Nec nimio post*: see n. to v 988 *Nec nimio plus*. *rigidi mor. iac.*: you can say *vir iacet merita morte* i.e. *cecidit* or *occisus est mer. morte*; thus Odyss. *a* 46 *Καὶ λίην κεῖνός γε ἐοικότι κεῖται ὀλέθρῳ*, which Ovid fasti iii 707 translates *Morte iacent merita*; but scarcely *artus iacent rigida morte*: this a Lambinus and Lachmann felt instinctively, a Wakefield never could feel; and yet iv 454 *in summa corpus iacet omne quiete* might be thought to mediate between the two expressions.

1197 *Octavo* cet.: he now returns to Thuc. who says 49 8 *ὥστε ἢ διεφθείροντο οἱ πλείους ἐναταῖοι καὶ ἑβδομαῖοι κ.τ.λ.* meaning of course that

the seventh and the ninth were the two critical days: the sad necessity of the metre I fear has caused Lucr. thus seriously to vary the statement. **1198** *lampade*: see n. to v 402 *lampada*. **1199** *fun. leti*: III 42 *Tartara leti*. **1200** *nigra proluvie alvi* is the *διαρροίας ἀκράτου* of Thuc.; Galen quoted there by Arnold explains one kind of *ἄκρητος ὑποχώρησις* to be the *τὸν τῆς μελαίνης χολῆς χύμον* unmixed with any watery matter. **1202—1204** there is nothing in Thuc. corresponding to these vss., but just before Lucr. has, as we saw, been copying him: thus 1201 expresses Thuc. l. l. *οἱ πολλοὶ ὕστερον δι' αὐτὴν ἀσθενείᾳ ἀπεφθείροντο*: 1205 foll. he again takes him up, *καὶ εἴ τις ἐκ τῶν μεγίστων περιγένοιτο κ.τ.λ.*: what comes between the words just quoted is as follows, *διεξῄει γὰρ διὰ παντὸς τοῦ σώματος ἄνωθεν ἀρξάμενον τὸ ἐν τῇ κεφαλῇ πρῶτον ἱδρυθὲν κακόν*, the disease took its course through the whole body beginning in the head: is it not then probable that the poet, having a corrupt copy or an imperfect recollection of his author, has misapprehended his meaning, confounding *τὸ ἐν τῇ κεφαλῇ κακόν* with *capitis dolor*, and making the whole substance of the body run into the head instead of letting the disease pass from the head through the whole body? **1203** *sanguis*: see IV 1050. **1204** *Huc*, 'in alvum aut nares' Lach.: I believe it refers only to *nares*: besides Thuc. says nothing at all here of the *nares*, nor is it easy to see why Lucr. should do so except from misapprehending Thuc. in the way suggested above. **1205** *Profl. exierat*, **1217** *exeiret odorem*: see n. to v 1330 *exibant adactus*. **1209** *ferro priv.*: the words of Thuc. which Lucr. represents in 1206—1211 are these, *τῶν γε ἀκρωτηρίων ἀντίληψις αὐτοῦ ἐπεσήμαινε· κατέσκηπτε γὰρ ἐς αἰδοῖα καὶ ἐς ἄκρας χεῖρας καὶ πόδας, καὶ πολλοὶ στερισκόμενοι τούτων διέφευγον, εἰσὶ δ' οἳ καὶ τῶν ὀφθαλμῶν*: the disease passed through the body from the head downwards *ἐς τὴν κοιλίαν*, and if a man was not killed by the terrible ulceration and diarrhoea, it fastened on the extremities, the toes fingers genitals; and some escaped with the loss of these, *στερισκόμενοι τούτων*, or of the eyes: Lucr. however has understood *στερισκόμενοι* to mean *ferro privati*, and this has given an awkward turn to his whole sentence: this misapprehension was pointed out centuries ago by Victorius var. lect. XXXV 8, and in the letter above referred to, and seems to have brought upon him no small obloquy, from Lamb. and his correspondent Mercurialis among others: in those days, while everybody had ostentatiously to protest against the religion of Lucr., it seems to have been deemed an impertinence to question his knowledge of Greek or his clinical and surgical skill. **1211** *tamen*, quamvis sine manibus cet. **1212** *Usque adeo mortis* cet.: he takes advantage of his own error to point his favourite moral. *incesserat* is from *incedo*, not *incesso*: [comp. Caes. b. civ. II 29 1 *magnus omnium incessit timor auribus*: see Kraner (Hofmann) here: see also Draeger hist. synt. I p. 384 'Sall. Cat. 31 3 *quibus belli timor insolitus incesserat*;

Livy IV 57 10 *gravior cura patribus incessit*; wogegen Livius sonst den accus. setzt.'] **1213 1214** are a very literal translation of Thuc. *τοὺς δὲ καὶ λήθη ἐλάμβανε παραυτίκα ἀναστάντας τῶν πάντων ὁμοίως καὶ ἠγνόησαν σφᾶς τε αὐτοὺς καὶ τοὺς ἐπιτηδείους*, with the omission however of *παραυτίκα ἀναστάντας*, which seems of importance in the account; see the commentators of Thuc. **1214** *neque* = non: see n. to II 23: Livy XL 20 6 *ut neque scribi sibi vellet*, resembles Lucr.: [comp. too Aen. XII 903 *neque . . se cognoscit*; Lucil. I 12 *nec si Carneaden ipsum Orcu' remittat.*]

1215 *supra* goes with *iacerent*, as the prepos. only governs an accus. **1219** foll. comp. Livy XLI 21 7 *cadavera intacta a canibus ac volturibus tabes absumebat, satisque constabat nec illo nec priore anno in tanta strage boum hominumque volturium usquam visum*. **1219** *solibus*: *soles* for *dies* occurs in Virgil and others. **1222** *fida canum vis*: see n. to IV 681 *promissa canum vis*. **1225** see notes to 1247—1251. *vasta* must have its first sense of *vacua, deserta*, therefore almost the same as *Incomitata*. **1227** *ali*: see n. to IV 637. **1228** *Volvere* has much the same force as in Virg. geor. III 85 *volvit sub naribus ignem*, quoted by Wak. *licere* is used as an accus. subst.; see n. to I 418: but here it has a second infin. depending on it, *Volvere* and *tueri*: dederat ut liceret volvere. *cae. tem. tu.*: Aen. IV 451 *taedet caeli convexa tueri*. **1229** comp. Virgil geor. III 511 *Mox erat hoc ipsum exitio*. **1230** foll. in all this part he is closely following Thuc.: I do not commence a new paragraph, as the corresponding sentence in Thuc. could not well begin one. **1232** *morbo* is prob. the abl., the usual case after *implicitus* in Cicero Caesar and Livy; but it may be the dat. as in Livy XLI 21 5 *longinquo, maxime quartanae, implicabantur morbo*; who XXIII 34 11 has a third constr., *non tam in periculosum quam longum morbum implicitum*; as Nepos V 3 4 and XVII 8 6 *in morbum implicitus*. *morti damn.*: a rare constr.: *damnari in metallum, in opus publicum, ad bestias* are legal terms, for the last of which Apul. met. X 34 has *bestiis esse damnata*: Ov. ars II 387 *Nec mea vos uni damnat censura puellae*; Stat. Theb. VI 55 *Damnatus flammae torus*: *ad supplicium, ad poenam, ad opus damnari* occur in Tac. ann. VI 38, Trajan ap. Plin. 32 (41) 2, Suet. Nero 31 respectively: so Tac. ann. XVI 21 *ad mortem damnabatur*. [Kuehnast Liv. synt. p. 83 says *morti* is ablative here; see too Draeger hist. synt. p. 450 at top.] *ut esset* must be for *ut si, quasi, tamquam esset*, though it is a very rare use: Lach. quotes Val. Flaccus V 92 *fulsere undae, sol magnus ut orbem Tolleret aut nubem quateret polus*: but Nepos too, XIII 3 4, *at ille temeraria usus ratione non cessit maiorum natu auctoritati, et, ut in sua manu esset fortuna, quo contenderat, pervenit*: so mss. rightly I think; but editors read *velut* for *et ut*: is the omission of *si* like Catull. 10 32 *Utor tam bene quam mihi pararim?* *velut* for *velut si* is more common; I have noted down from Livy alone fourteen instances. **1234** *an.*

am.: auctor. ad Heren. IV 57 *amisit vitam, at non perdidit...amisit animam, potitus est gloriam*; [Plaut. asin. 604 *tibi te vitam esse amissurum*; and see Ussing's references there.] *respectans*, as V 975 *taciti respectabant*. **1235** *Quippe etenim* cet.: what is the meaning of these conjunctions? the poet has just been saying that the most piteous thing of all was to see how those who caught the disease at once lost heart, gave themselves over, and made no effort for life: he then goes on to say '*for* they at no time ceased to catch the infection' and so on. Why this *for*? how can the fear of danger of infection add to the grief and despair of those who are already stricken? both in these vss. and in what precedes and follows the poet is treading closely on the steps of the historian: now read the words he is here translating: 51 6 *δεινότατον δὲ παντὸς ἦν τοῦ κακοῦ ἥ τε ἀθυμία (πρὸς γὰρ τὸ ἀνέλπιστον εὐθὺς τραπόμενοι τῇ γνώμῃ πολλῷ μᾶλλον προΐεντο σφᾶς αὐτοὺς καὶ οὐκ ἀντεῖχον), καὶ ὅτι ἕτερος ἀφ' ἑτέρου θεραπείας ἀναπιμπλάμενοι, ὥσπερ τὰ πρόβατα, ἔθνησκον· καὶ τὸν πλεῖστον φθόρον τοῦτο ἐνεποίει*: that is to say, the most fearful feature of the plague was this, on the one hand the despondency and utter mental prostration of those who were attacked, on the other hand the great danger of contagion which scared away or else struck down the healthy, *ἥ τε ἀθυμία* and *καὶ ὅτι* both of course being subjects of *δεινότατον ἦν*: now is it not plain that Lucr. has carelessly made *καὶ ὅτι* depend on what immediately precedes, and has not referred it back to *δεινότατον ἦν*? and hence the strange paralogism involved in his *Quippe etenim*. *apisci*: this seems a not unnatural, but yet unusual application of the word: Plautus however in his epitaph has *mortem aptus est*. **1238** *cum. fun. fun.*: see n. to III 71 *caedem caede accumulantes*. **1239** *visere ad*: see n. to II 359 *revisit Ad stabulum*. But here too the argument is strange: 'this above all heaped death upon death; for those who refused to attend their own sick, killing neglect soon after would punish for their too great love of life and fear of death by a foul and evil end, left to themselves without help': he then adds naturally enough that they who did stay, caught the infection and died. He is here following closely the order of Thuc. who continues *εἴτε γὰρ μὴ θέλοιεν δεδιότες ἀλλήλοις προσιέναι, ἀπώλλυντο ἔρημοι*: but instead of making *οἱ πάσχοντες* nom. of *ἀπώλλυντο*, he took *οἱ δεδιότες προσιέναι* for its subject; and feeling the weakness of the argument he has tricked it out with these embellishments, and given three lines to express the two words of Thuc. The educated Romans of Lucretius' time had an exquisite knowledge of their own tongue, its syntax, its grammar, its prosody, all its refinements and capabilities; they were also well acquainted with Greek, such as Greek then was; but the Attic of Thucydides and Sophocles, of Plato and Demosthenes had been dead for centuries; and Greek had become the lingua franca of the civilised world. **1240** *mortis timentis*: I find no other instance of this construction; but Livy XXII 3 4 *non modo legum aut patrum maiestatis, sed ne deorum quidem satis metuens*: Horace has *metuens alterius viri* and *rixarum*; Ovid *metuentior deorum* and *metuentius numinis*; Horace *timidus procellae*, Ovid *timidus deorum*; Juvenal *metuens flagelli* and *virgae*: *cupiens* with a gen. is common in Plautus and Tacitus: [comp. too Virgil's *metuens pericli*; Cic. c. sen. gr. egit 4 *legumque metuentes*; de domo sua 70 *homines legum iudiciorumque metuentes*; Caes. b. civ. I 69 3 *fugiens laboris*; Ter. Ph. 623 *fugitans litium*: see too Draeger hist. synt. I p. 445.] **1241** *Poenibat*: see n. to IV 220 *moerorum*. **1242** *mactans*: 805 *plagae mactabilis*. **1243** *ibant*: see n. to III 265 *ire*.

1247—1251 appear like 1225 to be out of place and unconnected with what precedes and follows: they refer also to the same matter as that verse, to the neglect of the usual rites of burial: Lucr. in all this part of his poem follows the order of Thuc.: well 1246 concludes the topics contained in Thuc. 51; 1252 commences the questions with which Thuc. 52 opens: both then dwell in the same order on the crowding of people from the country into the town and the terrible mortality caused thereby; speak of the dead bodies piled up in the streets and by the fountains; the temples crammed with corpses: Thuc. then goes on to say *νόμοι τε πάντες συνεταράχθησαν, οἷς ἐχρῶντο πρότερον περὶ τὰς ταφάς, ἔθαπτον δὲ ὡς ἕκαστος ἐδύνατο*: so too Lucr. 1278, as if like Thuc. he were entering on a new question, begins *Nec mos ille sepulturae* cet. and in four verses paraphrases the words just cited: Thuc. then continues, *καὶ πολλοὶ ἐς ἀναισχύντους θήκας ἐτράποντο σπάνει τῶν ἐπιτηδείων διὰ τὸ συχνοὺς ἤδη προτεθνάναι σφίσιν*: and similarly Lucr. 1282 continues his paraphrase, *Multaque res subita* cet.: Thuc. then goes on *ἐπὶ πυρὰς γὰρ ἀλλοτρίας, φθάσαντες τοὺς νήσαντας, οἱ μὲν ἐπιθέντες τὸν ἑαυτῶν νεκρὸν ὑφῆπτον*: these simple words Lucr. expresses with some poetical embellishment in the last four vss. of his poem: Thuc. completes the above sentence with this clause, *οἱ δὲ καιομένου ἄλλου ἄνωθεν ἐπιβαλόντες ὃν φέροιεν ἀπῄεσαν*: the meaning of these words is given with similar embellishment in the vss. 1247—1251 which we are now considering. As the end of the poem is in an unfinished state, and as these vss. as well as 1225 are clearly out of place having no connexion either of sense or grammar with the context, is it not probable that they, like so many others, are incomplete sketches and marginal additions of the poet's, which he intended, but did not live, to embody with the rest of the poem, and which his editors, not knowing what else to do, put into their present place, almost it may be at hap-hazard? Lachmann's treatment of these vss. is highly unsatisfactory: *cernebant* is a violent change; and the *lacrimis lassi luctuque redibant* he refers to the lookers on who had something else to do in attending on their sick; not to those who had struggled to bury their dead, though that must be their meaning; nay it seems to me almost certain that the poet means by these words to express the *ἀπῄεσαν* of Thuc. l. l. **1247** *Inque aliis alium* has at

present nothing to govern it, perhaps never had; for the poet may never have completed the sentence: *Aut etiam bustis iam ardentibus iniciebant*, or the like would give the sense required. 'Cic. ad Att. IX 10 2 *nec umquam aliud in alio peccare destitit*' N. P. Howard. *populum suorum*: besides Ovid met. VI 198 quoted by Lach., comp. ib. XI 633; heroid. 9 51; 14 115; Sen. epist. 74 3; 77 13; [dial. X 2 4 *circumfusus clientium populus*;] Pliny XXXV 6; Pliny paneg. 23; Arnob. IV 7; Apul. met. II 8; IV 24; V 28; X 32. **1249** *bonam partem*, **1259** *Nec minimam partem*: see n. to III 64 *Non minimam partem*. **1251** *luctus* for the sickness or death of friends.

1252—1286: the country-people flocked into the town and increased the misery; all public places, even the temples, were crowded with the dead and dying; religion and all the decencies of burial were neglected. **1253** comp. V 933 *Nec robustus erat curvi moderator aratri Quisquam.* **1255** *ded. mor.*: see n. to II 1043. **1260** *languens, conveniens*: see notes 1 and 2 to V 692 693. **1262** *aestus*: Lachmann's *astu* I now think cannot be right: he has shewn sufficiently from Vitruvius and Priscian that *astu* or *asty* was used by the Romans for any case of ἄστυ; but its use here would be very abrupt, and Lucr. would I think have said *in astu*, as Vitruvius twice does. The heat too was perhaps the most marked cause of mortality; comp. the words of Thuc. here imitated, ἀλλ' ἐν καλύβαις πνιγηραῖς ὥρᾳ ἔτους διαιτωμένων ὁ φθόρος ἐγίγνετο οὐδενὶ κόσμῳ: and Livy III 6 3 *ea colluvio mixtorum omnis generis animantium et odore insolito urbanos et agrestem confertum in arta tecta aestu ac vigiliis angebat, ministeriaque in vicem ac contagio ipsa vulgabant morbos*; one does not wish to lose *Confertos*, any more than *aestus*; else *aestu Confectos* would complete the sentence: Plaut. most. 764 is too corrupt to support *aestu* in the sense 'during the heat.' I therefore think a v. has been lost. **1264** Thuc. 52 2 καὶ ἐν ταῖς ὁδοῖς ἐκαλινδοῦντο καὶ περὶ τὰς κρήνας ἁπάσας: so that the *silanos aq.* are these κρῆναι, and must have got their name from the water coming out of the mouth or body of a Silenus; see also Festus and Celsus in Forc., and Herzberg Prop. III p. 214. [*Silani* were apparently *fistulae* by which the water spirted out: comp. corp. inscr. Lat. VIII n. 6982 among a number of works of art 'silani aerei n. VI': and before, 'statuae aereae n. VI et Cupido. marmoreae n. VI.'] **1266** *Intercl. an.*: Livy XXIII 7 3; Tac. ann. VI 50. *dulc. aq.*: Livy IV 12 6 *per largitionis dulcedinem*; § 7 *dulcedine contionum*; [Cic. ad Q. frat. I 2 7 *quaedam dulcedo iracundiae.*] **1268** comp. Ov. met. VII 577 *Semianimes errare viis .. Adspiceres.* **1269 1270** Cic. Tusc. disp. III 26 cites from an old poet *barba paedore horrida atque Intonsa infuscat pectus inluvie scabrum*, which, if defence is needed, seems to defend the second v. which Lach. brackets: [comp. too Sen. Herc. Fur. 705 (709) *cuncta paedore horrida.*] **1270** Pacuv. 20 *illuvie corporis.* *pel. sup. os. un.* appears to be proverbial: Plaut. capt. 135 *Ossa atque pellis sum miser aegritudine*; aulul. III 6 28 *Qui ossa atque pellis totust: ita cura macet*; Virg. ecl. III 102 *vix ossibus haerent*; Hor. epod. 17 22 *ossa pelle amicta lurida.* [**1271** *sor. sep.*: Sen. rhet. controv. I 1 18 *obrutus sordibus.*] **1274** *caelestum*: so *infantum, parentum, meantum, salutantum*, etc. *manebant*: see n. to II 843 *manere*; [and comp. Catull. 76 5 *Multa parata manent in longa aetate.*] **1275** Gellius XII 10 8 *Titus autem Lucretius in carmine suo pro* aedituis aedituentes *appellat.* **1276** foll.: it would not be easy to say what feeling was uppermost in the mind of Lucr. when following in the footsteps of Thuc. he wrote these vss. **1277** *enim* see n. to I 419: Virg. ecl. I 14 *namque* comes 6th, Catull. 66 65 5th in the sentence. **1278—1286** are paraphrased by Ovid met VII 606—610. **1279** *humari*: perhaps N. P. Howard's *humare* is to be read; but I think *humari* may well have the reciprocal force you find in Soph. Phil. 945 Θανὼν παρέξω δαῖθ' ὑφ' ὧν ἐφερβόμην. **1281** *pro re pr.*: Aen. IV 337 *Pro re pauca loquar* seems to mean 'pro causa nostra', as Sen. Herc. Fur. 401 interprets, *pauca pro causa loquar Nostra.* **1282** *res sub.*; Livy III 8 7; X 26 9; XXV 38 1; XXVI 44 2; XXVIII 30 7; Plaut. curc. 302. **1283** *rogorum* depends on *extructa*, as 561 *quae sunt extructa domorum*; IV 361 *saxorum structa*: Ovid l. l. 610 *alienisque ignibus ardent*; Sen. Oed. 64 *Tum propria flammis corpora alienis cremant. Diripitur ignis: nullus est miseris pudor.* **1284** *Insuper* followed by an accus.; see n. to 192; Lucr. uses also the abl. **1286** *Rix. pot. qu. c. desererentur*: the regular constr. whether a finite verb or a partic. precede: Livy III 21 6 *aliorum exemplo peccate potius quam alii vestro recte faciant*; IX 14 16 *omnia patienda potius quam proderetur salus*; XXXIX 10 2 *mori et sibi et illi satius esse quam id faceret*; II 48 6 *non diutius, quam recens dolor proximae cladis transiret, quiescentibus*: even with adjectives; as Mela III 43 *ad frequentiora quam adire audeant.* [Comp. Caes. b. Gall. VII 17 7 *praestare omnes perferre acerbitates quam non civibus Romanis ... parentarent*: and see Weissenborn Livy II 15 2.]

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LUCRETIUS

ON THE NATURE OF THINGS

BOOK FIRST

Mother of the Aeneadae, darling of men and gods, increase-giving Venus, who beneath the gliding signs of heaven fillest with thy presence the ship-carrying sea, the corn-bearing lands, since through thee every kind of living things is conceived, rises up and beholds the light of the sun. Before thee, goddess, flee the winds, the clouds of heaven; before thee and thy advent; for thee earth manifold in works puts forth sweet-smelling flowers; for thee the levels of the sea do laugh and heaven propitiated shines with outspread light. For soon as the vernal aspect of day is disclosed, and the birth-favouring breeze of favonius unbarred is blowing fresh, first the fowls of the air, o lady, shew signs of thee and thy entering in, throughly smitten in heart by thy power. Next the wild herds bound over the glad pastures and swim the rapid rivers: in such wise each made prisoner by thy charms follows thee with desire, whither thou goest to lead it on. Yes, throughout seas and mountains and sweeping rivers and leafy homes of birds and grassy plains, striking fond love into the breasts of all thou constrainest them each after its kind to continue their races with desire. Since thou then art sole mistress of the nature of things and without thee nothing rises up into the divine borders of light, nothing grows to be glad or lovely, fain would I have thee for a helpmate in writing the verses which I essay to pen on the nature of things for our own son of the Memmii, whom thou, goddess, hast willed to have no peer, rich as he ever is in every grace. Wherefore all the more, o lady, lend my lays an everliving charm. Cause meanwhile the savage

works of war to be lulled to rest throughout all seas and lands; for thou alone canst bless mankind with calm peace, seeing that Mavors lord of battle controls the savage works of war, Mavors who often flings himself into thy lap quite vanquished by the never-healing wound of love; and then with upturned face and shapely neck thrown back feeds with love his greedy sight gazing, goddess, open-mouthed on thee; and as backward he reclines, his breath stays hanging on thy lips. While then, lady, he is reposing on thy holy body, shed thyself about him and above, and pour from thy lips sweet discourse, asking, glorious dame, gentle peace for the Romans. For neither can we in our country's day of trouble with untroubled mind think only of our work, nor can the illustrious offset of Memmius in times like these be wanting to the general weal.

*

for what remains to tell, apply to true reason unbusied ears and a keen mind withdrawn from cares, lest my gifts set out for you with stedfast zeal you abandon with disdain, before they are understood. For I will essay to discourse to you of the most high system of heaven and the gods and will open up the first-beginnings of things, out of which nature gives birth to all things and increase and nourishment, and into which nature likewise dissolves them back after their destruction. These we are accustomed in explaining their reason to call matter and begetting bodies of things and to name seeds of things and also to term first bodies, because from them as first elements all things are.

When human life to view lay foully prostrate upon earth crushed down under the weight of religion, who shewed her head from the quarters of heaven with hideous aspect lowering upon mortals, a man of Greece ventured first to lift up his mortal eyes to her face and first to withstand her to her face. Him neither story of gods nor thunderbolts nor heaven with threatening roar could quell: they only chafed the more the eager courage of his soul, filling him with desire to be the first to burst the fast bars of nature's portals. Therefore the living force of his soul gained the day: on he passed far beyond the flaming walls of the world and traversed throughout in mind and spirit the immeasurable universe; whence he returns a conqueror to tell us what can, what cannot come into being; in short on what principle each thing

has its powers defined, its deep-set boundary mark. Therefore religion is put under foot and trampled upon in turn; us his victory brings level with heaven.

This is what I fear herein, lest haply you should fancy that you are entering on unholy grounds of reason and treading the path of sin; whereas on the contrary often and often that very religion has given birth to sinful and unholy deeds. Thus in Aulis the chosen chieftains of the Danai, foremost of men, foully polluted with Iphianassa's blood the altar of the Trivian maid. Soon as the fillet encircling her maiden tresses shed itself in equal lengths adown each cheek, and soon as she saw her father standing sorrowful before the altars and beside him the ministering priests hiding the knife and her countrymen at sight of her shedding tears, speechless in terror she dropped down on her knees and sank to the ground. Nor aught in such a moment could it avail the luckless girl that she had first bestowed the name of father on the king. For lifted up in the hands of the men she was carried shivering to the altars, not after due performance of the customary rites to be escorted by the clear-ringing bridal song, but in the very season of marriage, stainless maid mid the stain of blood, to fall a sad victim by the sacrificing stroke of a father, that thus a happy and prosperous departure might be granted to the fleet. So great the evils to which religion could prompt!

You yourself some time or other overcome by the terror-speaking tales of the seers will seek to fall away from us. Ay indeed for how many dreams may they now imagine for you, enough to upset the calculations of life and trouble all your fortunes with fear! And with good cause; for if men saw that there was a fixed limit to their woes, they would be able in some way to withstand the religious scruples and threatenings of the seers. As it is, there is no way, no means of resisting, since they must fear after death everlasting pains. For they cannot tell what is the nature of the soul, whether it be born or on the contrary find its way into men at their birth, and whether it perish together with us when severed from us by death or visit the gloom of Orcus and wasteful pools or by divine decree find its way into brutes in our stead, as sang our Ennius who first brought down from delightful Helicon a crown of unfading leaf, destined to bright renown throughout Italian clans of men. And yet with all this Ennius

sets forth that there are Acherusian quarters, publishing it in immortal verses; though in our passage thither neither our souls nor bodies hold together, but only certain idols pale in wondrous wise. From these places he tells us the ghost of everliving Homer uprose before him and began to shed salt tears and to unfold in words the nature of things. Wherefore we must well grasp the principle of things above, the principle by which the courses of the sun and moon go on, the force by which every thing on earth proceeds, but above all we must find out by keen reason what the soul and the nature of the mind consist of, and what thing it is which meets us when awake and frightens our minds, if we are under the influence of disease; meets and frightens us too when we are buried in sleep; so that we seem to see and hear speaking to us face to face them who are dead, whose bones earth holds in its embrace. Nor does my mind fail to perceive how hard it is to make clear in Latin verses the dark discoveries of the Greeks, especially as many points must be dealt with in new terms on account of the poverty of the language and the novelty of the questions. But yet your worth and the looked for pleasure of sweet friendship prompt me to undergo any labour and lead me on to watch the clear nights through, seeking by what words and in what verse I may be able in the end to shed on your mind so clear a light that you can thoroughly scan hidden things.

This terror then and darkness of mind must be dispelled not by the rays of the sun and glittering shafts of day, but by the aspect and the law of nature; the warp of whose design we shall begin with this first principle, nothing is ever gotten out of nothing by divine power. Fear in sooth holds so in check all mortals, because they see many operations go on in earth and heaven, the causes of which they can in no way understand, believing them therefore to be done by power divine. For these reasons when we shall have seen that nothing can be produced from nothing, we shall then more correctly ascertain that which we are seeking, both the elements out of which every thing can be produced and the manner in which all things are done without the hand of the gods.

If things came from nothing, any kind might be born of any thing, nothing would require seed. Men for instance might rise out of the sea, the scaly race out of the earth, and birds might

burst out of the sky; horned and other herds, every kind of wild beasts would haunt with changing brood tilth and wilderness alike. Nor would the same fruits keep constant to trees, but would change; any tree might bear any fruit. For if there were not begetting bodies for each, how could things have a fixed unvarying mother? But in fact because things are all produced from fixed seeds, each thing is born and goes forth into the borders of light out of that in which resides its matter and first bodies; and for this reason all things cannot be gotten out of all things, because in particular things resides a distinct power. Again why do we see the rose put forth in spring, corn in the season of heat, vines yielding at the call of autumn, if not because, when the fixed seeds of things have streamed together at the proper time, whatever is born discloses itself, while the due seasons are there and the quickened earth brings its weakly products in safety forth into the borders of light? But if they came from nothing, they would rise up suddenly at uncertain periods and unsuitable times of year, inasmuch as there would be no first-beginnings to be kept from a begetting union by the unpropitious season. No nor would time be required for the growth of things after the meeting of the seed, if they could increase out of nothing. Little babies would at once grow into men and trees in a moment would rise and spring out of the ground. But none of these events it is plain ever comes to pass, since all things grow step by step [at a fixed time], as is natural, [since they all grow] from a fixed seed and in growing preserve their kind; so that you may be sure that all things increase in size and are fed out of their own matter. Furthermore without fixed seasons of rain the earth is unable to put forth its gladdening produce, nor again if kept from food could the nature of living things continue its kind and sustain life; so that you may hold with greater truth that many bodies are common to many things, as we see letters common to different words, than that any thing could come into being without first-beginnings. Again why could not nature have produced men of such a size and strength as to be able to wade on foot across the sea and rend great mountains with their hands and outlive many generations of living men, if not because an unchanging matter has been assigned for begetting things and what can arise out of this matter is fixed? We must admit therefore that nothing can come from nothing, since things

require seed before they can severally be born and be brought out into the buxom fields of air. Lastly since we see that tilled grounds surpass untilled and yield a better produce by the labour of hands, we may infer that there are in the earth first-beginnings of things which by turning up the fruitful clods with the share and labouring the soil of the earth we stimulate to rise. But if there were not such, you would see all things without any labour of ours spontaneously come forth in much greater perfection.

Moreover nature dissolves every thing back into its first bodies and does not annihilate things. For if aught were mortal in all its parts alike, the thing in a moment would be snatched away to destruction from before our eyes; since no force would be needed to produce disruption among its parts and undo their fastenings. Whereas in fact, as all things consist of an imperishable seed, nature suffers the destruction of nothing to be seen, until a force has encountered it sufficient to dash things to pieces by a blow or to pierce through the void places within them and break them up. Again if time, whenever it makes away with things through age, utterly destroys them eating up all their matter, out of what does Venus bring back into the light of life the race of living things each after its kind, or, when they are brought back, out of what does earth manifold in works give them nourishment and increase, furnishing them with food each after its kind? Out of what do its own native fountains and extraneous rivers from far and wide keep full the sea? Out of what does ether feed the stars? For infinite time gone by and lapse of days must have eaten up all things which are of mortal body. Now if in that period of time gone by those things have existed, of which this sum of things is composed and recruited, they are possessed no doubt of an imperishable body, and cannot therefore any of them return to nothing. Again the same force and cause would destroy all things without distinction, unless everlasting matter held them together, matter more or less closely linked in mutual entanglement: a touch in sooth would be sufficient cause of death, inasmuch as any amount of force must of course undo the texture of things in which no parts at all were of an everlasting body. But in fact, because the fastenings of first-beginnings one with the other are unlike and matter is everlasting, things continue with body uninjured, until a force is found to encounter them

strong enough to overpower the texture of each. A thing therefore never returns to nothing, but all things after disruption go back into the first bodies of matter. Lastly rains die, when father ether has tumbled them into the lap of mother earth; but then goodly crops spring up and boughs are green with leaves upon the trees, trees themselves grow and are laden with fruit; by them in turn our race and the race of wild beasts are fed, by them we see glad towns teem with children and the leafy forests ring on all sides with the song of new birds; through them cattle wearied with their load of fat lay their bodies down about the glad pastures and the white milky stream pours from the distended udders; through them a new brood with weakly limbs frisks and gambols over the soft grass, rapt in their young hearts with the pure new milk. None of the things therefore which seem to be lost is utterly lost, since nature replenishes one thing out of another and does not suffer any thing to be begotten, before she has been recruited by the death of some other.

Now mark me: since I have taught that things cannot be born from nothing, cannot when begotten be brought back to nothing, that you may not haply yet begin in any shape to mistrust my words, because the first-beginnings of things cannot be seen by the eyes, take moreover this list of bodies which you must yourself admit are in the number of things and cannot be seen. First of all the force of the wind when aroused beats on the harbours and whelms huge ships and scatters clouds; sometimes in swift whirling eddy it scours the plains and straws them with large trees and scourges the mountain summits with forest-rending blasts: so fiercely does the wind rave with a shrill howling and rage with threatening roar. Winds therefore sure enough are unseen bodies which sweep the seas, the lands, ay and the clouds of heaven, tormenting them and catching them up in sudden whirls. On they stream and spread destruction abroad in just the same way as the soft liquid nature of water, when all at once it is borne along in an overflowing stream, and a great downfall of water from the high hills augments it with copious rains, flinging together fragments of forests and entire trees; nor can the strong bridges sustain the sudden force of coming water: in such wise turbid with much rain the river dashes upon the piers with mighty force: makes havoc with loud

noise and rolls under its eddies huge stones: wherever aught opposes its waves, down it dashes it. In this way then must the blasts of wind as well move on, and when they like a mighty stream have borne down in any direction, they push things before them and throw them down with repeated assaults, sometimes catch them up in curling eddy and carry them away in swift-circling whirl. Wherefore once and again I say winds are unseen bodies, since in their works and ways they are found to rival great rivers which are of a visible body. Then again we perceive the different smells of things, yet never see them coming to our nostrils; nor do we behold heats nor can we observe cold with the eyes nor are we used to see voices. Yet all these things must consist of a bodily nature, since they are able to move the senses; for nothing but body can touch and be touched. Again clothes hung up on a shore which waves break upon become moist, and then get dry if spread out in the sun. Yet it has not been seen in what way the moisture of water has sunk into them nor again in what way this has been dispelled by heat. The moisture therefore is dispersed into small particles which the eyes are quite unable to see. Again after the revolution of many of the sun's years a ring on the finger is thinned on the under side by wearing, the dripping from the eaves hollows a stone, the bent ploughshare of iron imperceptibly decreases in the fields, and we behold the stone-paved streets worn down by the feet of the multitude; the brass statues too at the gates shew their right hands to be wasted by the touch of the numerous passers by who greet them. These things then we see are lessened, since they have been thus worn down; but what bodies depart at any given time the nature of vision has jealously shut out our seeing. Lastly the bodies which time and nature add to things by little and little, constraining them to grow in due measure, no exertion of the eyesight can behold; and so too wherever things grow old by age and decay, and when rocks hanging over the sea are eaten away by the gnawing salt spray, you cannot see what they lose at any given moment. Nature therefore works by unseen bodies.

And yet all things are not on all sides jammed together and kept in by body: there is also void in things. To have learned this will be good for you on many accounts; it will not suffer you to wander in doubt and be to seek in the sum of things and

distrustful of our words. If there were not void, things could not move at all; for that which is the property of body, to let and hinder, would be present to all things at all times; nothing therefore could go on, since no other thing would be the first to give way. But in fact throughout seas and lands and the heights of heaven we see before our eyes many things move in many ways for various reasons, which things, if there were no void, I need not say would lack and want restless motion: they never would have been begotten at all, since matter jammed on all sides would have been at rest. Again however solid things are thought to be, you may yet learn from this that they are of rare body: in rocks and caverns the moisture of water oozes through and all things weep with abundant drops; food distributes itself through the whole body of living things; trees grow and yield fruit in season, because food is diffused through the whole from the very roots over the stem and all the boughs. Voices pass through walls and fly through houses shut, stiffening frost pierces to the bones. Now if there are no void parts, by what way can the bodies severally pass? You would see it to be quite impossible. Once more, why do we see one thing surpass another in weight though not larger in size? For if there is just as much body in a ball of wool as there is in a lump of lead, it is natural it should weigh the same, since the property of body is to weigh all things downwards, while on the contrary the nature of void is ever without weight. Therefore when a thing is just as large, yet is found to be lighter, it proves sure enough that it has more of void in it; while on the other hand that which is heavier shews that there is in it more of body and that it contains within it much less of void. Therefore that which we are seeking with keen reason exists sure enough, mixed up in things; and we call it void.

And herein I am obliged to forestall this point which some raise, lest it draw you away from the truth. The waters they say make way for the scaly creatures as they press on, and open liquid paths, because the fish leave room behind them, into which the yielding waters may stream; thus other things too may move and change place among themselves, although the whole sum be full. This you are to know has been taken up on grounds wholly false. For on what side I ask can the scaly creatures move for-

wards, unless the waters have first made room? again on what side can the waters give place, so long as the fish are unable to go on? Therefore you must either strip all bodies of motion or admit that in things void is mixed up from which every thing gets its first start in moving. Lastly if two broad bodies after contact quickly spring asunder, the air must surely fill all the void which is formed between the bodies. Well however rapidly it stream together with swift-circling currents, yet the whole space will not be able to be filled up in one moment; for it must occupy first one spot and then another, until the whole is taken up. But if haply any one supposes that, when the bodies have started asunder, that result follows because the air condenses, he is mistaken; for a void is then formed which was not before, and a void also is filled which existed before; nor can the air condense in such a way, nor supposing it could, could it methinks without void draw into itself and bring its parts together.

Wherefore however long you hold out by urging many objections, you must needs in the end admit that there is a void in things. And many more arguments I may state to you in order to accumulate proof on my words; but these slight footprints are enough for a keen-searching mind to enable you by yourself to find out all the rest. For as dogs often discover by smell the lair of a mountain-ranging wild beast though covered over with leaves, when once they have got on the sure tracks, thus you in cases like this will be able by yourself alone to see one thing after another and find your way into all dark corners and draw forth the truth. But if you lag or swerve a jot from the reality, this I can promise you, Memmius, without more ado: such plenteous draughts from abundant wellsprings my sweet tongue shall pour from my richly furnished breast, that I fear slow age will steal over our limbs and break open in us the fastnesses of life, ere the whole store of reasons on any one question has by my verses been dropped into your ears.

But now to resume the thread of the design which I am weaving in verse: all nature then, as it exists by itself, is founded on two things: there are bodies and there is void in which these bodies are placed and through which they move about. For that body exists by itself the general feeling of mankind declares; and unless at the very first belief in this be firmly grounded, there

will be nothing to which we can appeal on hidden things in order to prove anything by reasoning of mind. Then again, if room and space which we call void did not exist, bodies could not be placed anywhere nor move about at all to any side; as we have demonstrated to you a little before. Moreover there is nothing which you can affirm to be at once separate from all body and quite distinct from void, which would so to say count as the discovery of a third nature. For whatever shall exist, this of itself must be something or other. Now if it shall admit of touch in however slight and small a measure, it will, be it with a large or be it with a little addition, provided it do exist, increase the amount of body and join the sum. But if it shall be intangible and unable to hinder any thing from passing through it on any side, this you are to know will be that which we call empty void. Again whatever shall exist by itself, will either do something or will itself suffer by the action of other things, or will be of such a nature as things are able to exist and go on in. But no thing can do and suffer without body, nor aught furnish room except void and vacancy. Therefore beside void and bodies no third nature taken by itself can be left in the number of things, either such as to fall at any time under the ken of our senses or such as any one can grasp by the reason of his mind.

For whatever things are named, you will either find to be properties linked to these two things or you will see to be accidents of these things. That is a property which can in no case be disjoined and separated without utter destruction accompanying the severance, such as the weight of a stone, the heat of fire, the fluidity of water. Slavery on the other hand, poverty and riches, liberty war concord and all other things which may come and go while the nature of the thing remains unharmed, these we are wont, as it is right we should, to call accidents. Time also exists not by itself, but simply from the things which happen the sense apprehends what has been done in time past, as well as what is present and what is to follow after. And we must admit that no one feels time by itself abstracted from the motion and calm rest of things. So when they say that the daughter of Tyndarus was ravished and the Trojan nations were subdued in war, we must mind that they do not force us to admit that these things are by themselves, since those generations of men, of whom

these things were accidents, time now gone by has irrevocably swept away. For whatever shall have been done may be termed an accident in one case of the Teucran people, in another of the countries simply. Yes, for if there had been no matter of things and no room and space in which things severally go on, never had the fire, kindled by love of the beauty of Tyndarus' daughter, blazed beneath the Phrygian breast of Alexander and lighted up the famous struggles of cruel war, nor had the timber horse unknown to the Trojans wrapt Pergama in flames by its night-issuing brood of sons of the Greeks; so that you may clearly perceive that all actions from first to last exist not by themselves and are not by themselves in the way that body is, nor are terms of the same kind as void is, but are rather of such a kind that you may fairly call them accidents of body and of the room in which they severally go on.

Bodies again are partly first-beginnings of things, partly those which are formed of a union of first-beginnings. But those which are first-beginnings of things no force can quench: they are sure to have the better by their solid body. Although it seems difficult to believe that aught can be found among things with a solid body. For the lightning of heaven passes through the walls of houses, as well as noise and voices; iron grows red-hot in the fire and stones burn with fierce heat and burst asunder; the hardness of gold is broken up and dissolved by heat; the ice of brass melts vanquished by the flame; warmth and piercing cold ooze through silver, since we have felt both, as we held cups with the hand in due fashion and the water was poured down into them. So universally there is found to be nothing solid in things. But yet because true reason and the nature of things constrains, attend until we make clear in a few verses that there are such things as consist of solid and everlasting body, which we teach are seeds of things and first-beginnings, out of which the whole sum of things which now exists has been produced.

First of all then since there has been found to exist a two-fold and widely dissimilar nature of two things, that is to say of body and of place in which things severally go on, each of the two must exist for and by itself and quite unmixed. For wherever there is empty space which we call void, there body is not; wherever again body maintains itself, there empty void no wise exists.

First bodies therefore are solid and without void. Again since there is void in things begotten, solid matter must exist about this void, and no thing can be proved by true reason to conceal in its body and have within it void, unless you choose to allow that that which holds it in is solid. Again that can be nothing but a union of matter which can keep in the void of things. Matter therefore, which consists of a solid body, may be everlasting, though all things else are dissolved. Moreover if there were no empty void, the universe would be solid; unless on the other hand there were certain bodies to fill up whatever places they occupied, the existing universe would be empty and void space. Therefore sure enough body and void are marked off in alternate layers, since the universe is neither of a perfect fulness nor a perfect void. There are therefore certain bodies which can vary void space with full. These can neither be broken in pieces by the stroke of blows from without nor have their texture undone by aught piercing to their core nor give way before any other kind of assault; as we have proved to you a little before. For without void nothing seems to admit of being crushed in or broken up or split in two by cutting, or of taking in wet or permeating cold or penetrating fire, by which all things are destroyed. And the more anything contains within it of void, the more thoroughly it gives way to the assault of these things. Therefore if first bodies are as I have shewn solid and without void, they must be everlasting. Again unless matter had been eternal, all things before this would have utterly returned to nothing and whatever things we see would have been born anew from nothing. But since I have proved above that nothing can be produced from nothing, and that what is begotten cannot be recalled to nothing, first-beginnings must be of an imperishable body, into which all things can be dissolved at their last hour, that there may be a supply of matter for the reproduction of things. Therefore first-beginnings are of solid singleness, and in no other way can they have been preserved through ages during infinite time past in order to reproduce things.

Again if nature had set no limit to the breaking of things, by this time the bodies of matter would have been so far reduced by the breaking of past ages that nothing could within a fixed time be conceived out of them and reach its utmost growth of

being. For we see that anything is more quickly destroyed than again renewed; and therefore that which the long, the infinite duration of all bygone time had broken up, demolished and destroyed, could never be reproduced in all remaining time. But now, sure enough, a fixed limit to their breaking has been set, since we see each thing renewed, and at the same time definite periods fixed for things each after its kind to reach the flower of their age. Moreover while the bodies of matter are most solid, it may yet be explained in what way all things which are formed soft, as air, water, earth, fires, are so formed and by what force they severally go on, since once for all there is void mixed up in things. But on the other hand if the first-beginnings of things be soft, it cannot be explained out of what enduring basalt and iron can be produced; for their whole nature will utterly lack a first foundation to begin with. First-beginnings therefore are strong in solid singleness, and by a denser combination of these all things can be closely packed and exhibit enduring strength.

Again if no limit has been set to the breaking of bodies, nevertheless the several bodies which go to things must survive from eternity up to the present time, not yet assailed by any danger. But since they are possessed of a frail nature, it is not consistent with this that they could have continued through eternity harassed through ages by countless blows. Again too since a limit of growing and sustaining life has been assigned to things each after its kind, and since by the laws of nature it stands decreed what they can each do and what they cannot do, and since nothing is changed, but all things are so constant that the different birds all in succession exhibit in their body the distinctive marks of their kind, they must sure enough have a body of unchangeable matter also. For if the first-beginnings of things could in any way be vanquished and changed, it would then be uncertain too what could and what could not rise into being, in short on what principle each thing has its powers defined, its deep-set boundary mark; nor could the generations reproduce so often each after its kind the nature, habits, way of life and motions of the parents.

Then again since there is ever a bounding point [to bodies, which appears to us to be a least, there ought in the same way to be a bounding point the least conceivable] to that first body which already is beyond what our senses can perceive: that point sure

enough is without parts and consists of a least nature and never has existed apart by itself and will not be able in future so to exist, since it is in itself a part of that other; and so a first and single part and then other and other similar parts in succession fill up in close serried mass the nature of the first body; and since these cannot exist by themselves, they must cleave to that from which they cannot in any way be torn. First-beginnings therefore are of solid singleness, massed together and cohering closely by means of least parts, not compounded out of a union of those parts, but, rather, strong in everlasting singleness. From them nature allows nothing to be torn, nothing further to be worn away, reserving them as seeds for things. Again unless there shall be a least, the very smallest bodies will consist of infinite parts, inasmuch as the half of the half will always have a half and nothing will set bounds to the division. Therefore between the sum of things and the least of things what difference will there be? There will be no distinction at all; for how absolutely infinite soever the whole sum is, yet the things which are smallest will equally consist of infinite parts. Now since on this head true reason protests and denies that the mind can believe it, you must yield and admit that there exist such things as are possessed of no parts and are of a least nature. And since these exist, those first bodies also you must admit to be solid and everlasting. Once more, if nature, creatress of things, had been wont to compel all things to be broken up into least parts, then too she would be unable to reproduce anything out of those parts, because those things which are enriched with no parts cannot have the properties which begetting matter ought to have, I mean the various entanglements, weights, blows, clashings, motions, by means of which things severally go on.

For which reasons they who have held fire to be the matter of things and the sum to be formed out of fire alone, are seen to have strayed most widely from true reason. At the head of whom enters Heraclitus to do battle, famous for obscurity more among the frivolous than the earnest Greeks who seek the truth. For fools admire and like all things the more which they perceive to be concealed under involved language, and determine things to be true which can prettily tickle the ears and are varnished over with finely sounding phrase.

For I want to know how things can be so various, if they are

formed out of fire one and unmixed: it would avail nothing for hot fire to be condensed or rarefied, if the same nature which the whole fire has, belonged to the parts of fire as well. The heat would be more intense by compression of parts, more faint by their severance and dispersion. More than this you cannot think it in the power of such causes to effect, far less could so great a diversity of things come from mere density and rarity of fires. Observe also, if they suppose void to be mixed up in things, fire may then be condensed and left rare; but because they see many things rise up in contradiction to them and shrink from leaving unmixed void in things, fearing the steep, they lose the true road, and do not perceive on the other hand that if void is taken from things, all things are condensed and out of all things is formed one single body, which cannot briskly radiate anything from it, in the way heat-giving fire emits light and warmth, letting you see that it is not of closely compressed parts. But if they haply think that in some other way fires may be quenched in the union and change their body, you are to know that if they shall scruple on no side to do this, all heat sure enough will be utterly brought to nothing, and all things that are produced will be formed out of nothing. For whenever a thing changes and quits its proper limits, at once this change of state is the death of that which was before. Therefore something or other must needs be left to those fires of theirs undestroyed, that you may not have all things absolutely returning to nothing, and the whole store of things born anew and flourishing out of nothing. Since then in fact there are some most unquestionable bodies which always preserve the same nature, on whose going or coming and change of order things change their nature and bodies are transformed, you are to know that these first bodies of things are not of fire. For it would matter nothing that some should withdraw and go away and others should be added on and some should have their order changed, if one and all they yet retained the nature of heat; for whatever they produced would be altogether fire. But thus methinks it is: there are certain bodies whose clashings, motions, order, position, and shapes, produce fires, and which by a change of order change the nature of the things and do not resemble fire nor anything else which has the power of sending bodies to our senses and touching by its contact our sense of touch.

Again to say that all things are fire and that no real thing except fire exists in the number of things, as this same man does, appears to be sheer dotage. For he himself takes his stand on the side of the senses to fight against the senses and shakes their authority, on which rests all our belief, ay from which this fire as he calls it is known to himself; for he believes that the senses can truly perceive fire, he does not believe they can perceive all other things which are not a whit less clear. Now this appears to me to be as false as it is foolish; for to what shall we appeal? what surer test can we have than the senses, whereby to note truth and falsehood? Again why should any one rather abolish all things and choose to leave the single nature of heat, than deny that fires exist, while he allows any thing else to be? it seems to be equal madness to affirm either this or that.

For these reasons they who have held that fire is the matter of things and that the sum can be formed out of fire, and they who have determined air to be the first-beginning in begetting things, and all who have held that water by itself alone forms things, or that earth produces all things and changes into all the different natures of things, appear to have strayed exceedingly wide of the truth; as well as they who make the first-beginnings of things twofold coupling air with fire and earth with water, and they who believe that all things grow out of four things, fire earth and air and water. Chief of whom is Agrigentine Empedocles: him within the three-cornered shores of its lands that island bore, about which the Ionian sea flows in large cranklings, and splashes up brine from its green waves. Here the sea racing in its straitened frith divides by its waters the shores of Italia's lands from the other's coasts; here is wasteful Charybdis and here the rumblings of Aetna threaten anew to gather up such fury of flames, as again with force to belch forth the fires bursting from its throat and carry up to heaven once more the lightnings of flame. Now though this great country is seen to deserve in many ways the wonder of mankind and is held to be well worth visiting, rich in all good things, guarded by large force of men, yet seems it to have held within it nothing more glorious than this man, nothing more holy marvellous and dear. The verses too of his godlike genius cry with a loud voice and set forth in such wise his glorious discoveries that he hardly seems born of a mortal stock.

Yet he and those whom we have mentioned above immeasurably inferior and far beneath him, although, the authors of many excellent and godlike discoveries, they have given responses from so to say their hearts' holy of holies with more sanctity and on much more unerring grounds than the Pythia who speaks out from the tripod and laurel of Phoebus, have yet gone to ruin in the first-beginnings of things: it is there they have fallen, and, great themselves, great and heavy has been that fall; first because they have banished void from things and yet assign to them motions, and allow things soft and rare, air sun fire earth, living things and corn, and yet mix not up void in their body; next because they suppose that there is no limit to the division of bodies and no stop set to their breaking and that there exists no least at all in things; though we see that that is the bounding point of any thing which seems to be least to our senses, so that from this you may infer that because the things which you do not see have a bounding point, there is a least in them. Moreover since they assign soft first-beginnings of things, which we see to have birth and to be of a body altogether mortal, the sum of things must in that case revert to nothing and the store of things be born anew and flourish out of nothing: how wide now of the truth both these doctrines are you will already comprehend. In the next place these bodies are in many ways mutually hostile and poisonous; and therefore they will either perish when they have met, or will fly asunder just as we see, when a storm has gathered, lightnings and rains and winds fly asunder.

Again if all things are produced from four things and all again broken up into those things, how can they be called first-beginnings of things any more than things be called their first-beginnings, the supposition being reversed? For they are begotten time about and interchange colour and their whole nature without ceasing. But if haply you suppose that the body of fire and of earth and air and the moisture of water meet in such a way that none of them in the union changes its nature, no thing I tell you can be then produced out of them, neither living thing nor thing with inanimate body, as a tree; in fact each thing amid the medley of this discordant mass will display its own nature and air will be seen to be mixed up with earth and heat to remain in union with moisture. But first-beginnings ought in begetting things to

bring with them a latent and unseen nature in order that no thing stand out, to be in the way and prevent whatever is produced from having its own proper being.

Moreover they go back to heaven and its fires for a beginning, and first suppose that fire changes into air, next that from air water is begotten and earth is produced out of water, and that all in reverse order come back from earth, water first, next air, then heat, and that these cease not to interchange, to pass from heaven to earth, from earth to the stars of ether. All which first-beginnings must on no account do; since something unchangeable must needs remain over, that things may not utterly be brought back to nothing. For whenever a thing changes and quits its proper limits, at once this change of state is the death of that which was before. Wherefore since those things which we have mentioned a little before pass into a state of change, they must be formed out of others which cannot in any case be transformed, that you may not have things returning altogether to nothing. Why not rather hold that there are certain bodies possessed of such a nature, that, if they have haply produced fire, the same may, after a few have been taken away and a few added on and the order and motion changed, produce air; and that all other things may in the same way interchange with one another?

'But plain matter of fact clearly proves' you say 'that all things grow up into the air and are fed out of the earth; and unless the season at the propitious period send such abundant showers that the trees reel beneath the soaking storms of rain, and unless the sun on its part foster them and supply heat, corn trees and living things could not grow'. Quite true, and unless solid food and soft water should recruit us, our substance would waste away and life break wholly up out of all the sinews and bones; for we beyond doubt are recruited and fed by certain things, this and that other thing by certain other things. Because many first-beginnings common to many things in many ways are mixed up in things, therefore sure enough different things are fed by different things. And it often makes a great difference with what things and in what position the same first-beginnings are held in union and what motions they mutually impart and receive; for the same make up heaven sea lands rivers sun, the same make up corn trees and living things; but they are mixed

up with different things and in different ways as they move. Nay you see throughout even in these verses of ours many elements common to many words, though you must needs admit that the lines and words differ one from the other both in meaning and in the sound wherewith they sound. So much can elements effect by a mere change of order; but those elements which are the first-beginnings of things can bring with them more combinations out of which different things can severally be produced.

Let us now also examine the homoeomeria of Anaxagoras as the Greeks term it, which the poverty of our native speech does not allow us to name in our own tongue; though it is easy enough to set forth in words the thing itself. First of all then, when he speaks of the homoeomeria of things, you must know he supposes bones to be formed out of very small and minute bones and flesh of very small and minute fleshes and blood by the coming together of many drops of blood, and gold he thinks can be composed of grains of gold and earth be a concretion of small earths, and fires can come from fires and water from waters, and everything else he fancies and supposes to be produced on a like principle. And yet at the same time he does not allow that void exists anywhere in things, or that there is a limit to the division of things. Wherefore he appears to me on both these grounds to be as much mistaken as those whom we have already spoken of above. Moreover the first-beginnings which he supposes are too frail; if first-beginnings they be which are possessed of a nature like to the things themselves and are just as liable to suffering and death, and which nothing reins back from destruction. For which of them will hold out, so as to escape death, beneath so strong a pressure within the very jaws of destruction? fire or water or air? which of these? blood or bones? Not one methinks, where everything will be just as essentially mortal as those things which we see with the senses perish before our eyes vanquished by some force. But I appeal to facts demonstrated above for proof that things cannot fall away to nothing nor on the other hand grow from nothing. Again since food gives increase and nourishment to the body, you are to know that our veins and blood and bones [and the like are formed of things foreign to them in kind]; or if they shall say that all foods are of a mixed body and contain in them small bodies of sinews and bones and veins as well and particles of blood, it will follow

that all food, solid as well as liquid, must be held to be composed of things foreign to them in kind, of bones that is and sinews and matter and blood mixed up. Again if all the bodies which grow out of the earth, are in the earths, the earth must be composed of things foreign to it in kind which grow out of these earths. Apply again this reasoning to other things, and you may use just the same words. If flame and smoke and ash are latent in woods, woods must necessarily be composed of things foreign to them in kind. Again all those bodies, to which the earth gives food, it increases [out of things foreign to them in kind which rise out of the earth: thus too the bodies of flame which issue from the woods, are fed] out of things foreign to them in kind which rise out of these woods.

Here some slight opening is left for evasion, which Anaxagoras avails himself of, choosing to suppose that all things though latent are mixed up in things, and that is alone visible of which there are the largest number of bodies in the mixture and these more ready to hand and stationed in the first rank. This however is far banished from true reason. For then it were natural that corn too should often, when crushed by the formidable force of the stone, shew some mark of blood or some other of the things which have their nourishment in our body. For like reasons it were fitting that from grasses too, when we rub them between two stones, blood should ooze out; that waters should yield sweet drops, in flavour like to the udder of milk in sheep; yes and that often, when clods of earth have been crumbled, kinds of grasses and corn and leaves should be found to lurk distributed among the earth in minute quantities; and lastly that ash and smoke and minute fires should be found latent in woods, when they were broken off. Now since plain matter of fact teaches that none of these results follows, you are to know that things are not so mixed up in things; but rather seeds common to many things must in many ways be mixed up and latent in things.

'But it often comes to pass on high mountains' you say 'that contiguous tops of tall trees rub together, the strong southwinds constraining them so to do, until the flower of flame has broken out and they have burst into a blaze'. Quite true and yet fire is not innate in woods; but there are many seeds of heat, and when they by rubbing have streamed together, they produce conflagra-

tions in the forests. But if the flame was stored up ready made in the forests, the fire could not be concealed for any length of time, but would destroy forests, burn up trees indiscriminately. Do you now see, as we said a little before, that it often makes a very great difference with what things and in what position the same first-beginnings are held in union and what motions they mutually impart and receive, and that the same may when a little changed in arrangement produce say fires and a fir? just as the words too consist of elements only a little changed in arrangement, though we denote firs and fires with two quite distinct names. Once again, if you suppose that whatever you perceive among visible things cannot be produced without imagining bodies of matter possessed of a like nature, in this way, you will find, the first-beginnings of things are destroyed: it will come to this that they will be shaken by loud fits of convulsive laughter and will bedew with salt tears face and cheeks.

Now mark and learn what remains to be known and hear it more distinctly. Nor does my mind fail to perceive how dark the things are; but the great hope of praise has smitten my heart with sharp thyrsus, and at the same time has struck into my breast sweet love of the muses, with which now inspired I traverse in blooming thought the pathless haunts of the Pierides never yet trodden by sole of man. I love to approach the untasted springs and to quaff, I love to cull fresh flowers and gather for my head a distinguished crown from spots whence the muses have yet veiled the brows of none; first because I teach of great things and essay to release the mind from the fast bonds of religious scruples, and next because on a dark subject I pen such lucid verses o'erlaying all with the muses' charm. For that too would seem to be not without good grounds: just as physicians when they purpose to give nauseous wormwood to children, first smear the rim round the bowl with the sweet yellow juice of honey, that the unthinking age of children may be fooled as far as the lips, and meanwhile drink up the bitter draught of wormwood and though beguiled yet not be betrayed, but rather by such means recover health and strength; so I now, since this doctrine seems generally somewhat bitter to those by whom it has not been handled, and the multitude shrinks back from it in dismay, have resolved to set forth to you our doctrine in sweet-toned Pierian verse and o'erlay it as it were

with the pleasant honey of the muses, if haply by such means I might engage your mind on my verses, till you clearly perceive the whole nature of things, its shape and frame.

But since I have taught that most solid bodies of matter fly about for ever unvanquished through all time, mark now, let us unfold whether there is or is not any limit to their sum; likewise let us clearly see whether that which has been found to be void, or room and space, in which things severally go on, is all of it altogether finite or stretches without limits and to an unfathomable depth.

Well then the existing universe is bounded in none of its dimensions; for then it must have had an outside. Again it is seen that there can be an outside of nothing, unless there be something beyond to bound it, so that that is seen, farther than which the nature of this our sense does not follow the thing. Now since we must admit that there is nothing outside the sum, it has no outside, and therefore is without end and limit. And it matters not in which of its regions you take your stand; so invariably, whatever position any one has taken up, he leaves the universe just as infinite as before in all directions. Again if for the moment all existing space be held to be bounded, supposing a man runs forward to its outside borders and stands on the utmost verge and then throws a winged javelin, do you choose that when hurled with vigorous force it shall advance to the point to which it has been sent and fly to a distance, or do you decide that something can get in its way and stop it? for you must admit and adopt one of the two suppositions; either of which shuts you out from all escape and compels you to grant that the universe stretches without end. For whether there is something to get in its way and prevent its coming whither it was sent and placing itself in the point intended, or whether it is carried forward, in either case it has not started from the end. In this way I will go on and, wherever you have placed the outside borders, I will ask what then becomes of the javelin. The result will be that an end can no where be fixed, and that the room given for flight will still prolong the power of flight. Lastly one thing is seen by the eyes to end another thing; air bounds off hills, and mountains air, earth limits sea and sea again all lands; the universe however there is nothing outside to end.

Again if all the space of the whole sum were enclosed within fixed borders and were bounded, in that case the store of matter by its solid weights would have streamed together from all sides to the lowest point nor could anything have gone on under the canopy of heaven, no nor would there have been a heaven nor sunlight at all, inasmuch as all matter, settling down through infinite time past, would lie together in a heap. But as it is, sure enough no rest is given to the bodies of the first-beginnings, because there is no lowest point at all, to which they might stream together as it were, and where they might take up their positions. All things are ever going on in ceaseless motion on all sides and bodies of matter stirred to action are supplied from beneath out of infinite space. Therefore the nature of room and the space of the unfathomable void are such as bright thunderbolts cannot race through in their course though gliding on through endless tract of time, no nor lessen one jot the journey that remains to go by all their travel: so huge a room is spread out on all sides for things without any bounds in all directions round.

Again nature keeps the sum of things from setting any limit to itself, since she compels body to be ended by void and void in turn by body, so that either she thus renders the universe infinite by this alternation of the two, or else the one of the two, in case the other does not bound it, with its single nature stretches nevertheless immeasurably. [But void I have already proved to be infinite; therefore matter must be infinite: for if void were infinite, and matter finite] neither sea nor earth nor the glittering quarters of heaven nor mortal kind nor the holy bodies of the gods could hold their ground one brief passing hour; since forced asunder from its union the store of matter would be dissolved and borne along the mighty void, or rather I should say would never have combined to produce any thing, since scattered abroad it could never have been brought together. For verily not by design did the first-beginnings of things station themselves each in its right place guided by keen intelligence, nor did they bargain sooth to say what motions each should assume, but because many in number and shifting about in many ways throughout the universe they are driven and tormented by blows during infinite time past, after trying motions and unions of every kind at length they fall into

arrangements such as those out of which this our sum of things has been formed, and by which too it is preserved through many great years when once it has been thrown into the appropriate motions, and causes the streams to replenish the greedy sea with copious river waters and the earth, fostered by the heat of the sun, to renew its produce, and the race of living things to come up and flourish, and the gliding fires of ether to live: all which these several things could in no wise bring to pass, unless a store of matter could rise up from infinite space, out of which store they are wont to make up in due season whatever has been lost. For as the nature of living things when robbed of food loses its substance and wastes away, thus all things must be broken up, as soon as matter has ceased to be supplied, diverted in any way from its proper course. Nor can blows from without hold together all the sum which has been brought into union. They can it is true frequently strike upon and stay a part, until others come and the sum can be completed. At times however they are compelled to rebound and in so doing grant to the first-beginnings of things room and time for flight, to enable them to get clear away from the mass in union. Wherefore again and again I repeat many bodies must rise up; nay for the blows themselves not to fail, there is need of an infinite supply of matter on all sides.

And herein, Memmius, be far from believing this, that all things as they say press to the centre of the sum, and that for this reason the nature of the world stands fast without any strokes from the outside and the uppermost and lowest parts cannot part asunder in any direction, because all things have been always pressing towards the centre (if you can believe that anything can rest upon itself); or that the heavy bodies which are beneath the earth all press upwards and are at rest on the earth, turned topsy-turvy, just like the images of things we see before us in the waters. In the same way they maintain that living things walk head downwards and cannot tumble out of earth into the parts of heaven lying below them any more than our bodies can spontaneously fly into the quarters of heaven; that when those see the sun, we behold the stars of night; and that they share with us time about the seasons of heaven and pass nights equal in length to our days. But groundless [error has devised such dreams]

for fools, because they have embraced [false principles of reason.] For there can be no centre [where the universe is] infinite; no nor, even if there were a centre, could anything take up a position there [any more on that account] than for some quite different reason [be driven away.] For all room and space, which we term void, must through centre, through no-centre alike give place to heavy bodies, in whatever directions their motions tend. Nor is there any spot of such a sort that when bodies have reached it, they can lose their force of gravity and stand upon void; and that again which is void must not serve to support anything, but must, as its nature craves, continually give place. Things cannot therefore in such a way be held in union, o'er-mastered by love of a centre.

Again since they do not suppose that all bodies press to the centre, but only those of earth, and those of water, [both such as descend to the earth in rain] and those which are held in by the earth's body, so to say, the fluid of the sea and great waters from the mountains; while on the other hand they teach that the subtle element of air and hot fires at the same time are carried away from the centre and that for this reason the whole ether round bickers with signs and the sun's flame is fed throughout the blue of heaven, because heat flying from the centre all gathers together there, and that the topmost boughs of trees could not put forth leaves at all, unless from time to time [nature supplied] food from the earth to each [throughout both stem and boughs, their reasons are not only false, but they contradict each other. Space I have already proved to be infinite; and space being infinite matter as I have said must also be infinite] lest after the winged fashion of flames the walls of the world should suddenly break up and fly abroad along the mighty void, and all other things follow for like reasons and the innermost quarters of heaven tumble in from above and the earth in an instant withdraw from beneath our feet and amid the commingled ruins of things in it and of heaven, ruins unloosing the first bodies, should wholly pass away along the unfathomable void, so that in a moment of time not a wrack should be left behind, nothing save untenanted space and viewless first-beginnings. For on whatever side you shall first determine first bodies to be wanting, this side will be the

gate of death for things, through this the whole crowd of matter will fling itself abroad.

If you will throughly con these things, then carried to the end with slight trouble [you will be able by yourself to understand all the rest.] For one thing after another will grow clear and dark night will not rob you of the road and keep you from surveying the utmost ends of nature: in such wise things will light the torch for other things.

LUCRETIUS

ON THE NATURE OF THINGS

BOOK SECOND

It is sweet, when on the great sea the winds trouble its waters, to behold from land another's deep distress; not that it is a pleasure and delight that any should be afflicted, but because it is sweet to see from what evils you are yourself exempt. It is sweet also to look upon the mighty struggles of war arrayed along the plains without sharing yourself in the danger. But nothing is more welcome than to hold the lofty and serene positions well fortified by the learning of the wise, from which you may look down upon others and see them wandering all abroad and going astray in their search for the path of life, see the contest among them of intellect, the rivalry of birth, the striving night and day with surpassing effort to struggle up to the summit of power and be masters of the world. O miserable minds of men! o blinded breasts! in what darkness of life and in how great dangers is passed this term of life whatever its duration! not choose to see that nature craves for herself no more than this, that pain hold aloof from the body, and she in mind enjoy a feeling of pleasure exempt from care and fear? Therefore we see that for the body's nature few things are needed at all, such and such only as take away pain. Nay, though more gratefully at times they can minister to us many choice delights, nature for her part wants them not, when there are no golden images of youths through the house holding in their right hands flaming lamps for supply of light to the nightly banquet, when the house shines not with silver nor glitters with gold nor do the pannelled and gilded roofs reecho to the harp, what time, though these things be want-

ing, they spread themselves in groups on the soft grass beside a stream of water under the boughs of a high tree and at no great cost pleasantly refresh their bodies, above all when the weather smiles and the seasons of the year besprinkle the green grass with flowers. Nor do hot fevers sooner quit the body, if you toss about on pictured tapestry and blushing purple, than if you must lie under a poor man's blanket. Wherefore since treasures avail nothing in respect of our body nor birth nor the glory of kingly power, advancing farther you must hold that they are of no service to the mind as well; unless may be when you see your legions swarm over the ground of the campus waging the mimicry of war, strengthened flank and rear by powerful reserves and great force of cavalry, and you marshall them equipped in arms and animated with one spirit, thereupon you find that religious scruples scared by these things fly panic-stricken from the mind; and that then fears of death leave the breast unembarrassed and free from care, when you see your fleet swarm forth and spread itself far and wide. But if we see that these things are food for laughter and mere mockeries, and in good truth the fears of men and dogging cares dread not the clash of arms and cruel weapons, if unabashed they mix among kings and kesars and stand not in awe of the glitter from gold nor the brilliant sheen of the purple robe, how can you doubt that this is wholly the prerogative of reason, when the whole of life withal is a struggle in the dark? For even as children are flurried and dread all things in the thick darkness, thus we in the daylight fear at times things not a whit more to be dreaded than those which children shudder at in the dark and fancy sure to be. This terror therefore and darkness of mind must be dispelled not by the rays of the sun and glittering shafts of day, but by the aspect and law of nature.

Now mark and I will explain by what motion the begetting bodies of matter do beget different things and after they are begotten again break them up, and by what force they are compelled so to do and what velocity is given to them for travelling through the great void: do you mind to give heed to my words. For verily matter does not cohere inseparably massed together, since we see that everything wanes and perceive that all things ebb as it were by length of time and that age withdraws them from our sight, though yet the sum is seen to remain unimpaired by reason that

the bodies which quit each thing, lessen the things from which they go, gift with increase those to which they have come, compel the former to grow old, the latter to come to their prime, and yet abide not with these. Thus the sum of things is ever renewed and mortals live by a reciprocal dependency. Some nations wax, others wane, and in a brief space the races of living things are changed and like runners hand over the lamp of life.

If you think that first-beginnings of things can lag and by lagging give birth to new motions of things, you wander far astray from the path of true reason: since they travel about through void, the first-beginnings of things must all move on either by their own weight or haply by the stroke of another. For when during motion they have, as often happens, met and clashed, the result is a sudden rebounding in an opposite direction; and no wonder, since they are most hard and of weight proportioned to their solidity and nothing behind gets in their way. And that you may more clearly see that all bodies of matter are in restless movement, remember that there is no lowest point in the sum of the universe, and that first bodies have not where to take their stand, since space is without end and limit and extends immeasurably in all directions round, as I have shewn in many words and as has been proved by sure reason. Since this then is a certain truth, sure enough no rest is given to first bodies throughout the unfathomable void, but driven on rather in ceaseless and varied motion they partly, after they have pressed together, rebound leaving great spaces between, while in part they are so dashed away after the stroke as to leave but small spaces between. And all that form a denser aggregation when brought together and rebound leaving trifling spaces between, held fast by their own close-tangled shapes, these form enduring bases of stone and unyielding bodies of iron and the rest of their class, few in number, which travel onward along the great void. All the others spring far off and rebound far leaving great spaces between: these furnish us with thin air and bright sunlight. And many more travel along the great void, which have been thrown off from the unions of things or though admitted have yet in no case been able likewise to assimilate their motions. Of this truth, which I am telling, we have a representation and picture always going on before our eyes and present to us: observe whenever the rays are

let in and pour the sunlight through the dark chambers of houses: you will see many minute bodies in many ways through the apparent void mingle in the midst of the light of the rays, and as in never-ending conflict skirmish and give battle combating in troops and never halting, driven about in frequent meetings and partings; so that you may guess from this, what it is for first-beginnings of things to be ever tossing about in the great void. So far as it goes, a small thing may give an illustration of great things and put you on the track of knowledge. And for this reason too it is meet that you should give greater heed to these bodies which are seen to tumble about in the sun's rays, because such tumblings imply that motions also of matter latent and unseen are at the bottom. For you will observe many things there impelled by unseen blows to change their course and driven back to return the way they came now this way now that way in all directions round. All you are to know derive this restlessness from the first-beginnings. For the first-beginnings of things move first of themselves; next those bodies which form a small aggregate and come nearest so to say to the powers of the first-beginnings, are impelled and set in movement by the unseen strokes of those first bodies, and they next in turn stir up bodies which are a little larger. Thus motion mounts up from the first-beginnings and step by step issues forth to our senses, so that those bodies also move, which we can discern in the sunlight, though it is not clearly seen by what blows they so act. . . . go to p. 33

omit [Now what velocity is given to bodies of matter, you may apprehend, Memmius, in few words from this: when morning first sprinkles the earth with fresh light and the different birds flitting about the pathless woods through the buxom air fill all places with their clear notes, we see it to be plain and evident to all how suddenly the sun after rising is wont at such a time to overspread all things and clothe them with his light. But that heat which the sun emits and that bright light pass not through empty void; and therefore they are forced to travel more slowly, until they cleave through the waves so to speak of air. Nor do the several minute bodies of heat pass on one by one, but closely entangled and massed together; whereby at one and the same time they are pulled back by one another and are impeded from without, so that they are forced to travel more slowly. But the first-beginnings

which are of solid singleness, when they pass through empty void and nothing delays them from without and they themselves, single from the nature of their parts, are borne with headlong endeavour towards the one single spot to which their efforts tend, must sure enough surpass in velocity and be carried along much more swiftly than the light of the sun, and race through many times the extent of space in the same time in which the beams of the sun fill the heaven throughout. * nor follow up the several first-beginnings to see by what law each thing goes on.

But some in opposition to this, ignorant of matter, believe that nature cannot without the providence of the gods in such nice conformity to the ways of men vary the seasons of the year and bring forth crops, ay and all the other things, which divine pleasure the guide of life prompts men to approach, escorting them in person and enticing them by her fondlings to continue their races through the arts of Venus, that mankind may not come to an end. Now when they suppose that the gods designed all things for the sake of men, they seem to me in all respects to have strayed most widely from true reason. For even if I did not know what first-beginnings are, yet this, judging by the very arrangements of heaven, I would venture to affirm, and led by many other circumstances to maintain, that the nature of the world has by no means been made for us by divine power: so great are the defects with which it stands encumbered. All which, Memmius, we will hereafter make clear to you: we will now go on to explain what remains to be told of motions.

Now methinks is the place, herein to prove this point also that no bodily thing can by its own power be borne upwards and travel upwards; that the bodies of flames may not in this matter lead you into error. For they are begotten with an upward tendency, and in the same direction receive increase, and goodly crops and trees grow upwards, though their weights, so far as in them is, all tend downwards. And when fires leap to the roofs of houses and with swift flame lick up rafters and beams, we are not to suppose that they do so spontaneously without a force pushing them up. Even thus blood discharged from our body spirts out and springs up on high and scatters gore about. See you not too with what force the liquid of water spits out logs and beams? the more deeply we have pushed them sheer down and have pressed them

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in, many of us together, with all our might and much painful effort, with the greater avidity it vomits them up and casts them forth, so that they rise and start out more than half their length. And yet methinks we doubt not that these, so far as in them is, are all borne downwards through the empty void. In the same way flames also ought to be able, when squeezed out, to mount upward through the air, although their weights, so far as in them is, strive to draw them down. See you not too that the nightly meteors of heaven as they fly aloft draw after them long trails of flames in whatever direction nature has given them a passage? Do you not perceive stars and constellations fall to the earth? The sun also from the height of heaven sheds its heat on all sides and sows the fields with light; to the earth therefore as well the sun's heat tends. Lightnings also you see fly athwart the rains: now from this side now from that fires burst from the clouds and rush about; the force of flame falls to the earth all round.

This point too herein we wish you to apprehend: when bodies are borne downwards sheer through void by their own weights, at quite uncertain times and uncertain spots they push themselves a little from their course: you just and only just can call it a change of inclination. If they were not used to swerve, they would all fall down, like drops of rain, through the deep void, and no clashing would have been begotten nor blow produced among the first-beginnings: thus nature never would have produced aught.

But if haply any one believes that heavier bodies, as they are carried more quickly sheer through space, can fall from above on the lighter and so beget blows able to produce begetting motions, he goes most widely astray from true reason. For whenever bodies fall through water and thin air, they must quicken their descents in proportion to their weights, because the body of water and subtle nature of air cannot retard everything in equal degree, but more readily give way, overpowered by the heavier: on the other hand empty void cannot offer resistance to anything in any direction at any time, but must, as its nature craves, continually give way; and for this reason all things must be moved and borne along with equal velocity though of unequal weights through the unresisting void. Therefore heavier things will never be able to fall from above on lighter nor of themselves to beget blows

sufficient to produce the varied motions by which nature carries on things. Wherefore again and again I say bodies must swerve a little; and yet not more than the least possible; lest we be found to be imagining oblique motions and this the reality should refute. For this we see to be plain and evident, that weights, so far as in them is, cannot travel obliquely, when they fall from above, at least so far as you can perceive; but that nothing swerves in any case from the straight course, who is there that can perceive?]

Start → Again if all motion is ever linked together and a new motion ever springs from another in a fixed order and first-beginnings do not by swerving make some commencement of motion to break through the decrees of fate, that cause follow not cause from everlasting, whence have all living creatures here on earth, whence, I ask, has been wrested from the fates the power by which we go forward whither the will leads each, by which likewise we change the direction of our motions neither at a fixed time nor fixed place, but when and where the mind itself has prompted? For beyond a doubt in these things his own will makes for each a beginning and from this beginning motions are welled through the limbs. See you not too, when the barriers are thrown open at a given moment, that yet the eager powers of the horses cannot start forward so instantaneously as the mind itself desires? the whole store of matter through the whole body must be sought out, in order that stirred up through all the frame it may follow with undivided effort the bent of the mind; so that you see the beginning of motion is born from the heart, and the action first commences in the will of the mind and next is transmitted through the whole body and frame. Quite different is the case when we move on propelled by a stroke inflicted by the strong might and strong compulsion of another; for then it is quite clear that all the matter of the whole body moves and is hurried on against our inclination, until the will has reined it in throughout the limbs. Do you see then in this case that, though an outward force often pushes men on and compels them frequently to advance against their will and to be hurried headlong on, there yet is something in our breast sufficient to struggle against and resist it? And when too this something chooses, the store of matter is compelled sometimes to change its course through the limbs and frame, and after it has been forced forward, is reined in and settles back into

its place. Wherefore in seeds too you must admit the same, admit that besides blows and weights there is another cause of motions, from which this power of free action has been begotten in us, since we see that nothing can come from nothing. For weight forbids that all things be done by blows through as it were an outward force; but that the mind itself does not feel an internal necessity in all its actions and is not as it were overmastered and compelled to bear and put up with this, is caused by a minute swerving of first-beginnings at no fixed part of space and no fixed time. . . . (go to p. 36)

omit [Nor was the store of matter ever more closely massed nor held apart by larger spaces between; for nothing is either added to its bulk or lost to it. Wherefore the bodies of the first-beginnings in time gone by moved in the same way in which now they move, and will ever hereafter be borne along in like manner, and the things which have been wont to be begotten will be begotten after the same law and will be and will grow and will wax in strength so far as is given to each by the decrees of nature. And no force can change the sum of things; for there is nothing outside, either into which any kind of matter can escape out of the universe or out of which a new supply can arise and burst into the universe and change all the nature of things and alter their motions.

And herein you need not wonder at this, that though the first-beginnings of things are all in motion, yet the sum is seen to rest in supreme repose, unless where a thing exhibits motions with its individual body. For all the nature of first things lies far away from our senses beneath their ken; and therefore since they are themselves beyond what you can see, they must withdraw from sight their motion as well; and the more so that the things which we can see, do yet often conceal their motions when a great distance off. Thus often the woolly flocks as they crop the glad pastures on a hill, creep on whither the grass jewelled with fresh dew summons and invites each, and the lambs fed to the full gambol and playfully butt; all which objects appear to us from a distance to be blended together and to rest like a white spot on a green hill. Again when mighty legions fill with their movements all parts of the plains waging the mimicry of war, the glitter then lifts itself up to the sky and the whole earth round

gleams with brass and beneath a noise is raised by the mighty trampling of men and the mountains stricken by the shouting reecho the voices to the stars of heaven, and horsemen fly about and suddenly wheeling scour across the middle of the plains, shaking them with the vehemence of their charge. And yet there is some spot on the high hills, seen from which they appear to stand still and to rest on the plains as a bright spot.

Now mark and next in order apprehend of what kind and how widely differing in their forms are the beginnings of all things, how varied by manifold diversities of shape; not that a scanty number are possessed of a like form, but because as a rule they do not all resemble one the other. And no wonder; for since there is so great a store of them that, as I have shewn, there is no end or sum, they must sure enough not one and all be marked by an equal bulk and like shape, one with another. Let the race of man pass before you in review, and the mute swimming shoals of the scaly tribes and the blithe herds and wild beasts and the different birds which haunt the gladdening watering spots about river-banks and springs and pools, and those which flit about and throng the pathless woods: then go and take any one you like in any one kind, and you will yet find that they differ in their shapes, every one from every other. And in no other way could child recognise mother or mother child; and this we see that they all can do, and that they are just as well known to one another as human beings are. Thus often in front of the beauteous shrines of the gods a calf falls sacrificed beside the incense-burning altars, and spirts from its breast a warm stream of blood; but the bereaved mother as she ranges over the green lawns knows the footprints stamped on the ground by the cloven hoofs, scanning with her eyes every spot to see if she can anywhere behold her lost youngling: then she fills with her moanings the leafy wood each time she desists from her search and again and again goes back to the stall pierced to the heart by the loss of her calf; nor can the soft willows and grass quickened with dew and yon rivers gliding level with their banks comfort her mind and put away the care that has entered into her, nor can other forms of calves throughout the glad pastures divert her mind and ease it of its care: so persistently she seeks something special and known. Again the tender kids with

their shaking voices know their horned dams and the butting lambs the flocks of bleating sheep: thus they run, as nature craves, each without fail to its own udder of milk. Lastly in the case of any kind of corn you like you will yet find that any one grain is not so similar to any other in the same kind, but that there runs through them some difference to distinguish the forms. On a like principle of difference we see the class of shells paint the lap of earth, where the sea with gentle waves beats on the thirsty sand of the winding shore. Therefore again and again I say it is necessary for like reasons that first-beginnings of things, since they exist by nature and are not made by hand after the exact model of one, should fly about with shapes in some cases differing one from the other.

It is right easy for us on such a principle to explain why the fire of lightning has much more power to pierce than ours which is born of earthly pinewood: you may say that the heavenly fire of lightning subtle as it is is formed of smaller shapes and therefore passes through openings which this our fire cannot pass born as it is of woods and sprung from pine. Again light passes through horn, but rain is thrown off. Why? but that those first bodies of light are smaller than those of which the nurturing liquid of water is made. And quickly as we see wines flow through a strainer, sluggish oil on the other hand is slow to do so, because sure enough it consists of elements either larger in size or more hooked and tangled in one another, and therefore it is that the first-beginnings of things cannot so readily be separated from each other and severally stream through the several openings of any thing.

Moreover the liquids honey and milk excite a pleasant sensation of tongue when held in the mouth; but on the other hand the nauseous nature of wormwood and of harsh centaury writhes the mouth with a noisome flavour; so that you may easily see that the things which are able to affect the senses pleasantly, consist of smooth and round elements; while all those on the other hand which are found to be bitter and harsh, are held in connexion by particles that are more hooked and for this reason are wont to tear open passages into our senses and in entering in to break through the body.

All things in short which are agreeable to the senses and all

which are unpleasant to the feeling are mutually repugnant, formed as they are out of an unlike first shape; lest haply you suppose that the harsh grating of the creaking saw consists of elements as smooth as those of tuneful melodies which musicians wake into life with nimble fingers and give shape to on strings; or suppose that the first-beginnings are of like shape which pass into the nostrils of men, when noisome carcases are burning, and when the stage is fresh sprinkled with Cilician saffron, while the altar close by exhales Panchaean odours; or decide that the pleasant colours of things which are able to feast the eyes are formed of a seed like to the seed of those which make the pupil smart and force it to shed tears or from their disgusting aspect look hideous and foul. For every shape which gratifies the senses has been formed not without a smoothness in its elements; but on the other hand whatever is painful and harsh, has been produced not without some roughness of matter. There are too some elements which are with justice thought to be neither smooth nor altogether hooked with barbed points, but rather to have minute angles slightly projecting, so that they can tickle rather than hurt the senses; of which class tartar of wine is formed and the flavours of elecampane. Again that hot fires and cold frost have fangs of a dissimilar kind wherewith to pierce the senses, is proved to us by the touch of each. For touch, touch, ye holy divinities of the gods, the body's feeling is, either when an extraneous thing makes its way in, or when a thing which is born in the body hurts it, or gives pleasure as it issues forth by the birth-bestowing ways of Venus, or when from some collision the seeds are disordered within the body and distract the feeling by their mutual disturbance; as if haply you were yourself to strike with the hand any part of the body you please and so make trial. Wherefore the shapes of the first-beginnings must differ widely, since they are able to give birth to different feelings.

Again things which look to us hard and dense must consist of particles more hooked together, and be held in union because welded all through with branch-like elements. In this class first of all diamond stones stand in foremost line inured to despise blows, and stout blocks of basalt and the strength of hard iron and brass bolts which scream out as they hold fast to their staples. Those things which are liquid and of fluid body ought

to consist more of smooth and round elements; for the several drops have no mutual cohesion and their onward course too has a ready flow downwards. All things lastly which you see disperse themselves in an instant, as smoke mists and flames, if they do not consist entirely of smooth and round, must yet not be held fast by closely tangled elements, so that they may be able to pierce the body and enter it with biting power, yet not stick together: thus you may easily know, that whatever we see the senses have been able to allay, consists not of tangled but of pointed elements. Do not however hold it to be wonderful that some things which are fluid you see to be likewise bitter, for instance the sea's moisture: because it is fluid, it consists of smooth and round particles, and many rough bodies mixed up with these produce pains; and yet they must not be hooked so as to hold together: you are to know that though rough, they are yet spherical, so that while they roll freely on, they may at the same time hurt the senses. And that you may more readily believe that with smooth are mixed rough first-beginnings from which Neptune's body is made bitter, there is a way of separating these, and of seeing how the fresh water, when it is often filtered through the earth, flows by itself into a trench and sweetens; for it leaves above the first-beginnings of the nauseous saltness, inasmuch as the rough particles can more readily stay behind in the earth.

And now that I have shewn this, I will go on to link to it a truth which depends on this and from this draws its proof: the first-beginnings of things have different shapes, but the number of shapes is finite. If this were not so, then once more it would follow that some seeds must be of infinite bulk of body. For in the same seed, in the single small size of any first body you like the shapes cannot vary much from one another: say for instance that first bodies consist of three least parts, or augment them by a few more; when to wit in all possible ways, by placing each in turn at the top and at the bottom, by making the right change places with the left, you shall have tried all those parts of one first body and found what manner of shape each different arrangement gives to the whole of that body, if after all this haply you shall wish still to vary the shapes, you will have to add other parts; it will next follow that for like reasons the arrangement will require

other parts, if haply you shall wish still again to vary the shapes. From all this it results that increase of bulk in the body follows upon newness of the shapes. Wherefore you cannot possibly believe that seeds have an infinite variety of forms, lest you force some to be of a monstrous hugeness, which as I have above shewn cannot be proved. Moreover I tell you barbaric robes and radiant Meliboean purple dipped in Thessalian dye of shells [and the hues which are displayed] by the golden brood of peacocks steeped in laughing beauty would all be thrown aside surpassed by some new colour of things; the smell of myrrh would be despised and the flavours of honey, and the melodies of the swan and Phoebean tunes set off by the varied play of strings would in like sort be suppressed and silenced; for something ever would arise more surpassing than the rest. All things likewise might fall back into worse states, even as we have said they might advance to better; for reversely too one thing would be more noisome than all other things to nostril ear and eye and taste. Now since these things are not so, but a fixed limit has been assigned to things which bounds their sum on each side, you must admit that matter also has a finite number of different shapes. Once more from summer fires to chill frosts a definite path is traced out and in like manner is again travelled back; for every degree of cold and heat and intermediate warmths lie between those extremes, filling up in succession the sum. Therefore the things produced differ by finite degrees, since at both ends they are marked off by points, one at one, another at the other end, molested on the one hand by flames, on the other by stiffening frosts.

And now that I have shewn this, I will go on to link to it a truth which depends on this and from this draws its proof: the first-beginnings of things which have a like shape one with the other, are infinite in number. For since the difference of forms is finite, those which are like must be infinite or the sum of matter will be finite, which I proved not to be the case, when I shewed in my verses that the minute bodies of matter from everlasting continually uphold the sum of things through an uninterrupted succession of blows on all sides. For though you see that some animals are rarer than others and discern a less fruitful nature in them, yet in another quarter and spot and in distant lands there may be many of that kind and the full tale may be made up; just as we see that in the class of four-footed beasts snake-handed elephants are elsewhere especially numerous; for India is so fenced about with an ivory rampart made out of many thousands of these, that its inner parts cannot be reached, so great is the quantity of brutes, of which we see but very few samples. But yet though I should grant this point too: be there even as you will some one thing sole in its kind existing alone with a body that had birth, and let no other thing resemble it in the whole world; yet unless there shall be an infinite supply of matter out of which it may be conceived and brought into being, it cannot be produced, and, more than this, it cannot have growth and food. For though I should assume this point also that birth-giving bodies of some one thing are tossed about in finite quantity throughout the universe, whence, where, by what force and in what way shall they meet together and combine in so vast a sea, such an alien medley of matter? They have methinks no way of uniting; but even as when great and numerous shipwrecks have occurred, the great sea is wont to tumble about banks rudders yards prow masts and swimming oars, so that poop-fittings are seen floating about along every shore and utter to mortals a warning to try to shun the snares and violence and guile of the faithless sea, and never at any time to trust to it, when the winning face of calm ocean laughs treacherously; thus too if you shall once decide that certain first-beginnings are finite, different currents of matter must scatter and tumble them about through all time, so that they can never be brought into union and combine, nor abide in any union nor grow up and increase. But plain matter of fact shews that each of these results manifestly does take place, that things can be brought into being and when begotten advance in growth. It is clear then that in any class you like the first-beginnings of things are infinite, out of which all supplies are furnished.

Thus neither can death-dealing motions keep the mastery always nor entomb existence for evermore, nor on the other hand can the birth and increase giving motions of things preserve them always after they are born. Thus the war of first-beginnings waged from eternity is carried on with dubious issue: now here now there the life-bringing elements of things get the mastery and are o'ermastered in turn: with the funeral wail blends the cry which babies raise when they enter the borders of light; and

no night ever followed day nor morning night that heard not mingling with the sickly infant's cries wailings the attendants on death and black funeral.

And herein it is proper you should keep under seal, and guard, there consigned, in faithful memory this truth, that there is nothing whose nature is apparent to sense, which consists of one kind of first-beginnings; nothing which is not formed by a mixing of seed. And whenever a thing possesses in itself in larger measure many powers and properties, in that measure it shews that there are in it the greatest number of different kinds and varied shapes of first-beginnings. First of all the earth has in her first bodies out of which springs rolling coolness along replenish without fail the boundless sea, she has bodies out of which fires rise up; for in many spots the earth's crust is on fire and burns, though headstrong Aetna rages with fire of surpassing force. Then too she has bodies out of which she can raise for mankind goodly crops and joyous trees, out of which too she can supply to the mountain-ranging race of wild beasts rivers leaves and glad pastures. Wherefore she has alone been named great mother of gods and mother of beasts and parent of our body.

Of her the old and learned poets of the Greeks have sung, that [borne aloft on high-raised] seat in a chariot she drives a pair of lions, teaching that the great earth hangs in the expanse of air and that earth cannot rest on earth. To her chariot they have yoked wild beasts, because a brood however savage ought to be tamed and softened by the kind offices of parents. They have encircled the top of her head with a mural crown, because fortified in choice positions she sustains towns; adorned with which emblem the image of the divine mother is carried now-a-days through wide lands in awe-inspiring state. Her different nations after old-established ritual term Idaean mother, and give for escort Phrygian bands, because they tell that from those lands corn first began to be produced throughout the world. They assign her galli, because they would shew by this type that they who have done violence to the divinity of the mother and have proved ungrateful to their parents, are to be deemed unworthy to bring a living offspring into the borders of light. Tight-stretched tambourines and hollow cymbals resound all round to the stroke of their open hands, and horns menace with hoarse-sounding music, and

the hollow pipe stirs their minds in Phrygian mood. They carry weapons before them, emblems of furious rage, meet to fill the thankless souls and godless breasts of the rabble with terror for the divinity of the goddess. Therefore when first borne in procession through great cities she mutely enriches mortals with a blessing not expressed in words, they straw all her path with brass and silver presenting her with bounteous alms, and scatter over her a snow-shower of roses, o'ershadowing the mother and her troops of attendants. Here an armed band to which the Greeks give the name of Phrygian Curetes, in that it haply joins in the game of arms and springs up in measure all dripping with blood, shaking with its nodding the frightful crests upon the head, represents the Dictaean Curetes who, as the story is, erst drowned in Crete that infant cry of Jove, when the young band about the young babe in rapid dance arms in hand to measured tread beat brass on brass, that Saturn might not get him to consign to his devouring jaws and stab the mother to the heart with a never-healing wound. For these reasons they escort in arms the great mother, or else because they mean by this sign that the goddess preaches to men to be willing with arms and valour to defend their country and be ready to be a safeguard and an ornament to their parents. All which, well and beautifully as it is set forth and told, is yet widely removed from true reason. For the nature of gods must ever in itself of necessity enjoy immortality together with supreme repose, far removed and withdrawn from our concerns; since exempt from every pain, exempt from all dangers, strong in its own resources, not wanting aught of us, it is neither gained by favours nor moved by anger. And here if any one thinks proper to call the sea Neptune and corn Ceres and chooses rather to misuse the name of Bacchus than to utter the term that belongs to that liquor, let us allow him to declare that the earth is mother of the gods, if he only forbear in earnest to stain his mind with foul religion. The earth however is at all time without feeling, and because it receives into it the first-beginnings of many things, it brings them forth in many ways into the light of the sun.

And so the woolly flocks and the martial breed of horses and horned herds, though often cropping the grass from one field beneath the same canopy of heaven and slaking their thirst from

one stream of water, yet have all their life a dissimilar appearance and retain the nature of their parents and severally imitate their ways each after its kind: so great is the diversity of matter in any kind of herbage, so great in every river. And hence too any one you please out of the whole number of living creatures is made up of bones blood veins heat moisture flesh sinews; and these things again differ widely from one another and are composed of first-beginnings of unlike shape. Furthermore whatever things are set on fire and burned, store up in their body, if nothing else, at least those particles, out of which they may radiate fire and send out light and make sparks fly and scatter embers all about. If you will go over all other things by a like process of reasoning, you will thus find that they conceal in their body the seeds of many things and contain elements of various shapes. Again you see many things to which are given at once both colour and taste together with smell; especially those many offerings [which are burned on the altars]. These must therefore be made up of elements of different shapes; for smell enters in where colour passes not into the frame, colour too in one way, taste in another makes its entrance into the senses; so that you know they differ in the shapes of their first elements. Therefore unlike forms unite into one mass and things are made up of a mixture of seed. Throughout moreover these very verses of ours you see many elements common to many words, though yet you must admit that the verses and words one with another are different and composed of different elements; not that but few letters which are in common run through them or that no two words or verses one with another are made up entirely of the same, but because as a rule they do not all resemble one the other. Thus also though in other things there are many first-beginnings common to many things, yet they can make up one with the other a quite dissimilar whole; so that men and corn and joyous trees may fairly be said to consist of different elements.

And yet we are not to suppose that all things can be joined together in all ways; for then you would see prodigies produced on all hands, forms springing up half man half beast and sometimes tall boughs sprouting from the living body, and many limbs of land-creatures joined with those of sea-animals, nature too throughout the all-bearing lands feeding chimeras which

breathed flames from noisome mouth. It is plain however that nothing of the sort is done, since we see that all things produced from fixed seeds and a fixed mother can in growing preserve the marks of their kind. This you are to know must take place after a fixed law. For the particles suitable for each thing from all kinds of food when inside the body pass into the frame and joining on produce the appropriate motions; but on the other hand we see nature throw out on the earth those that are alien, and many things with their unseen bodies fly out of the body impelled by blows: those I mean which have not been able to join on to any part nor when inside to feel in unison with and adopt the vital motions. But lest you haply suppose that living things alone are bound by these conditions, such a law keeps all things within their limits. For even as things begotten are in their whole nature all unlike one the other, thus each must consist of first-beginnings of unlike shape; not that a scanty number are possessed of a like form, but because as a rule they do not all resemble one the other. Again since the seeds differ, there must be a difference in the spaces between, the passages, the connexions, the weights, the blows, the clashings, the motions; all which not only disjoin living bodies, but hold apart the lands and the whole sea, and keep all heaven away from the earth.

Now mark, and apprehend precepts amassed by my welcome toil, lest haply you deem that those things which you see with your eyes to be bright, because white are formed of white principles, or that the things which are black are born from black seed; or that things which are steeped in any other colour, bear that colour because the bodies of matter are dyed with a colour like to it. For the bodies of matter have no colour at all either like to the things or unlike. But if haply it seems to you that no impression of the mind can throw itself into these bodies, you wander far astray. For since men born blind who have never beheld the light of the sun, yet recognise bodies by touch, though linked with no colour for them from their first birth, you are to know that bodies can fall under the ken of our mind too, though stained with no colour. Again whatever things we ourselves touch in the thick darkness, we do not perceive to be dyed with any colour. And since I prove that this is the case, I will now

shew that there are things [which are possessed of no colour]. Well any colour without any exception changes into any other; and this first-beginnings ought in no wise to do: something unchangeable must remain over, that all things be not utterly reduced to nothing. For whenever a thing changes and quits its proper limits, at once this change of state is the death of that which was before. Therefore mind not to dye with colour the seeds of things, that you may not have all things altogether returning to nothing.

Moreover if no quality of colour is assigned to first-beginnings and they are yet possessed of varied shapes out of which they beget colours of every kind and change them about by reason that it makes a great difference with what other seeds and in what position the seeds are severally held in union and what motions they mutually impart and receive, you can explain at once with the greatest ease why those things which just before were of a black colour, may become all at once of marble whiteness; as the sea, when mighty winds have stirred up its waters, is changed into white waves of the brightness of marble: you may say that when the matter of that which we often see to be black, has been mixed up anew and the arrangement of its first-beginnings has been changed and some have been added and some been taken away, the immediate result is that it appears bright and white. But if the waters of the sea consisted of azure seeds, they could in no wise become white; for however much you jumble together seeds which are azure, they can never pass into a marble colour. But if the seeds which make up the one unmixed brightness of the sea are dyed some with one, some with other colours, just as often out of different forms and varied shapes something square and of a uniform figure is made up, in that case it were natural that as we see unlike forms contained in the square, so we should see in the water of the sea or in any other one and unmixed brightness colours widely unlike and different to one another. Moreover the unlike figures do not in the least hinder or prevent the whole figure from being a square on the outside; but the various colours of things are a let and hindrance to the whole things being of a uniform brightness.

Then too the reason which leads and draws us on sometimes to assign colours to the first-beginnings of things, falls to the ground, since white things are not produced from white, nor those which are black from black, but out of things of various colours. For white things will much more readily rise up and be born from no colour than from a black or any other colour which thwarts and opposes it.

Moreover since colours cannot exist without light and first-beginnings of things do not come out into the light, you may be sure they are clothed with no colour. For what colour can there be in total darkness? nay it changes in the light itself according as its brightness comes from a straight or slanting stroke of light. After this fashion the down which encircles and crowns the nape and throat of doves shews itself in the sun: at one time it is ruddy with the hue of bright pyropus; at another it appears by a certain way of looking at it to blend with coral-red green emeralds. The tail of the peacock when it is saturated with abundant light, changes in like fashion its colours as it turns about. And since these colours are begotten by a certain stroke of light, sure enough you must believe that they cannot be produced without it. And since the pupil receives into it a kind of blow, when it is said to perceive a white colour, and then another, when it perceives black or any other colour, and since it is of no moment with what colour the things which you touch are provided, but rather with what sort of shape they are furnished, you are to know that first-beginnings have no need of colours, but give forth sensations of touch varying according to their various shapes.

Moreover since no particular kind of colour is assigned to particular shapes and every configuration of first-beginnings can exist in any colour, why on a like principle are not the things which are formed out of them in every kind o'erlaid with colours of every kind? For then it were natural that crows too in flying should often display a white colour from white wings and that swans should come to be black from a black seed, or of any other different colour you please.

Again the more minute the parts are into which anything is rent, the more you may perceive the colour fade away by little and little and become extinct; as for instance if a piece of purple is torn into small shreds: when it has been plucked into separate

threads, the purple, and the scarlet far the most brilliant of colours, are quite effaced; from which you may infer that the shreds part with all their colour before they come back to the seeds of things.

Lastly since you admit that all bodies do not utter a voice nor emit a smell, for this reason you do not assign to all sounds and smells. So also since we cannot perceive all things with the eyes, you are to know that some things are as much denuded of colour as others are without smell and devoid of sound, and that the keen-discerning mind can just as well apprehend these things as it can take note of things which are destitute of other qualities.

But lest haply you suppose that first bodies remain stripped of colour alone, they are also wholly devoid of warmth and cold and violent heat, and are judged to be barren of sound and drained of moisture, and emit from their body no scent of their own. Just as when you set about preparing the balmy liquid of sweet marjoram and myrrh and the flower of spikenard which gives forth to the nostrils a scent like nectar, before all you should seek, so far as you may and can find it, the substance of scentless oil, such as gives out no perfume to the nostrils, that it may as little as possible meddle with and destroy by its own pungency the odours mixed in its body and boiled up with it; for the same reason the first-beginnings of things must not bring to the begetting of things a smell or sound of their own, since they cannot discharge anything from themselves, and for the same reason no taste either nor cold nor any heat moderate or violent, and the like. For as these things, be they what they may, are still such as to be liable to death, whether pliant with a soft, brittle with a crumbling, or hollow with a porous body, they must all be withdrawn from the first beginnings, if we wish to assign to things imperishable foundations for the whole sum of existence to rest upon: that you may not have things returning altogether to nothing.

To come to another point, whatever things we perceive to have sense, you must yet admit to be all composed of senseless first-beginnings: manifest tokens which are open to all to apprehend, so far from refuting or contradicting this, do rather themselves take us by the hand and constrain us to believe

that, as I say, living things are begotten from senseless things. We may see in fact living worms spring out of stinking dung, when the soaked earth has gotten putridity after excessive rains; and all things besides change in the same way: rivers, leaves and glad pastures change into cattle, cattle change their substance into our bodies, and often out of these the powers of wild beasts and the bodies of the strong of wing are increased. Therefore nature changes all foods into living bodies and engenders out of them all the senses of living creatures, much in the same way as she dissolves dry woods into flames and converts all things into fires. Now do you see that it is of great moment in what sort of arrangement the first-beginnings of things are severally placed and with what others they are mixed up, when they impart and receive motions?

Then again what is that which strikes your mind, affects that mind and constrains it to give utterance to many different thoughts, to save you from believing that the sensible is begotten out of senseless things? Sure enough it is because stones and wood and earth however mixed together are yet unable to produce vital sense. This therefore it will be well to remember herein, that I do not assert that the sensible and sensations are forthwith begotten out of all elements without exception which produce things; but that it is of great moment first how minute the particles are which make up the sensible thing and then what shape they possess and what in short they are in their motions arrangements and positions. None of which conditions we find in woods and clods; and yet even these when they have so to speak become rotten through the rains, bring forth worms, because bodies of matter driven from their ancient arrangements by a new condition are combined in the manner needed for the begetting of living creatures. Next they who hold that the sensible can be produced out of sensible elements, accustomed thus to derive their own sense from elements [which are sensible] in their turn, [do thus render their own seeds mortal,] when they make them soft; for all sense is bound up with flesh sinews and veins; which in everything we see to be soft and formed of a mortal body. But even suppose that these things can remain eternal: they must yet I presume either have the sense of some part or else be deemed to possess a sense

similar to the entire living creatures. But the parts cannot possibly have sense by themselves alone; for all sense of the different members has reference to something else; nor can the hand when severed from us nor any other part of the body whatever by itself maintain sensation. It remains to assume that they resemble the entire living creatures. In this case it is necessary that they should feel the things which we feel in the same way as we do, in order that they may be able in all points to work in concert with the vital sense. How then can they be called first-beginnings of things and shun the paths of death, seeing that they are living things, and that living things are one and the same with mortal things? Nay granting they could do this, yet by their meeting and union they will make nothing but a jumble and medley of living things; just you are to know as men cattle and wild beasts would be unable to beget any other thing by all their mixing with one another. But if haply they lose from their body their own sense and adopt another, what use was it to assign what is again withdrawn? moreover, the instance to which we had before recourse, inasmuch as we see the eggs of fowls change into living chicks and worms burst forth, when putridity has seized on the earth after excessive rains, you are to know that sensations can be begotten out of no-sensations.

But if haply any one shall say that sense so far may arise from no-sensation by a process of change, or because it is brought forth by a kind of birth, it will be enough to make plain and to prove to him that no birth takes place until a union of elements has first been effected, and that nothing changes without their having been united. Above all senses cannot exist in any body before the nature itself of the living thing has been begotten, because sure enough the matter remains scattered about in air rivers earth and things produced from earth, and has not met together and combined in appropriate fashion the vital motions by which the all-discerning senses are kindled into action in each living thing.

Again a blow more severe than its nature can endure, prostrates at once any living thing and goes on to stun all the senses of body and mind. For the positions of the first-beginnings are broken up and the vital motions entirely stopped, until the

matter, disordered by the shock through the whole frame, unties from the body the vital fastenings of the soul and scatters it abroad and forces it out through all the pores. For what more can we suppose the infliction of a blow can do, than shake from their place and break up the union of the several elements? Often too when the blow is inflicted with less violence, the remaining vital motions are wont to prevail, ay, prevail and still the huge disorders caused by the blow and recall each part into its proper channels and shake off the motion of death now reigning as it were paramount in the body and kindle afresh the almost lost senses. For in what other way should the thing be able to gather together its powers of mind and come back to life from the very threshold of death, rather than pass on to the goal to which it had almost run and so pass away?

Again since there is pain when the bodies of matter are disordered by any force throughout the living flesh and frame and quake in their seats within, and as when they travel back into their place, a soothing pleasure ensues, you are to know that first-beginnings can be assailed by no pain and can derive no pleasure from themselves; since they are not formed of any bodies of first-beginnings, so as to be distressed by any novelty in their motion or derive from it any fruit of fostering delight; and therefore they must not be possessed of any sense.

Again if in order that living creatures may severally have sense, sense is to be assigned to their first-beginnings as well, what are we to say of those of which mankind is specifically made? sure enough they burst into fits of shaking laughter and sprinkle with dewy tears face and cheeks and have the cunning to say much about the composition of things and to enquire next what their own first-beginnings are; since like in their natures to the entire mortals they must in their turn be formed out of other elements, then those others out of others, so that you can venture nowhere to come to a stop: yes, whatever you shall say speaks and laughs and thinks, I will press you with the argument that it is formed of other things performing these same acts. But if we see these notions to be sheer folly and madness, and a man may laugh though not made of laughing things, and think and reason in learned language though not formed of thoughtful and eloquent seeds, why cannot the things

which we see to have sense, just as well be made up of a mixture of things altogether devoid of sense?

Again we are all sprung from a heavenly seed, all have that same father, by whom mother earth the giver of increase, when she has taken in from him liquid drops of moisture, conceives and bears goodly crops and joyous trees and the race of man, bears all kinds of brute beasts, in that she supplies food with which all feed their bodies and lead a pleasant life and continue their race; wherefore with good cause she has gotten the name of mother. That also which before was from the earth, passes back into the earth, and that which was sent from the borders of ether, is carried back and taken in again by the quarters of heaven. Death does not extinguish things in such a way as to destroy the bodies of matter, but only breaks up the union amongst them, and then joins anew the different elements with others; and thus it comes to pass that all things change their shapes and alter their colours and receive sensations and in a moment yield them up; so that from all this you may know it matters much with what others and in what position the same first-beginnings of things are held in union and what motions they do mutually impart and receive, and you must not suppose that that which we see floating about on the surface of things and now born, then at once perishing, can be a property inherent in everlasting first bodies. Nay in our verses themselves it matters much with what other elements and in what kind of order the several elements are placed. If not all, yet by far the greatest number are alike; but the totals composed of them are made to differ by the position of these elements. Thus in actual things as well when the clashings motions arrangement position and shapes of matter change about, the things must also change.

Apply now, we entreat, your mind to true reason. For a new question struggles earnestly to gain your ears, a new aspect of things to display itself. But there is nothing so easy as not to be at first more difficult to believe than afterwards; and nothing too so great, so marvellous, that all do not gradually abate their admiration of it. Look up at the bright and unsullied hue of heaven and the stars which it holds within it, wandering all about, and the moon and the sun's light of dazzling brilliancy: if all these things were now for the first time, if I say they were now suddenly presented to mortals beyond all expectation, what could have been named that would be more marvellous than these things, or that nations beforehand would less venture to believe could be? nothing, methinks: so wondrous strange had been this sight. Yet how little, you know, wearied as all are to satiety with seeing, any one now cares to look up into heaven's glittering quarters! Cease therefore to be dismayed by the mere novelty and so to reject reason from your mind with loathing: weigh the questions rather with keen judgment and if they seem to you to be true, surrender, or if they are a falsehood, gird yourself to the encounter. For since the sum of space is unlimited outside beyond these walls of the world, the mind seeks to apprehend what there is yonder there, to which the spirit ever yearns to look forward, and to which the mind's immission reaches in free and unembarrassed flight.

In the first place we see that round in all directions, about above and underneath, throughout the universe there is no bound, as I have shewn and as the thing of itself proclaims with loud voice and as clearly shines out in the nature of bottomless space. In no wise then can it be deemed probable, when space yawns illimitable towards all points and seeds in number numberless and sum unfathomable fly about in manifold ways driven on in ceaseless motion, that this single earth and heaven have been brought into being, that those bodies of matter so many in number do nothing outside them; the more so that this world has been made by nature, just as the seeds of things have chanced spontaneously to clash, after being brought together in manifold wise without purpose, without foresight, without result, and at last have filtered through such seeds as, suddenly thrown together, were fitted to become on each occasion the rudiments of great things, of earth sea and heaven and the race of living things. Wherefore again and again I say you must admit that there are elsewhere other combinations of matter like to this which ether holds in its greedy grasp.

Again when much matter is at hand, when room is there and there is no thing, no cause to hinder, things sure enough must go on and be completed. Well then if on the one hand there is so great a store of seeds as the whole life of living

creatures cannot reckon up, and if the same force and nature abide in them and have the power to throw the seeds of things together into their several places in the same way as they are thrown together into our world, you must admit that in other parts of space there are other earths and various races of men and kinds of wild beasts.

Moreover in the sum of all there is no one thing which is begotten single in its kind and grows up single and sole of its kind; but a thing always belongs to some class and there are many other things in the same kind. First in the case of living things, most noble Memmius, you will find that in this sort has been begotten the mountain-ranging race of wild beasts, in this sort the breed of men, in this sort too the mute shoals of scaly creatures and all bodies of fowls. Wherefore on a like principle you must admit that earth and sun moon sea and all things else that are, are not single in their kind, but rather in number past numbering; since the deep-set boundary-mark of life just as much awaits these and they are just as much of a body that had birth, as any class of things which here on earth abounds in samples of its kind.

If you well apprehend and keep in mind these things, nature free at once and rid of her haughty lords is seen to do all things spontaneously of herself without the meddling of the gods. For I appeal to the holy breasts of the gods who in tranquil peace pass a calm time and an unruffled existence, who can rule the sum, who hold in his hand with controlling force the strong reins, of the immeasurable deep? who can at once make all the different heavens to roll and warm with ethereal fires all the fruitful earths, or be present in all places at all times, to bring darkness with clouds and shake with noise the heaven's serene expanse, to hurl lightnings and often throw down his own temples, and withdrawing into the deserts there to spend his rage in practising his bolt which often passes the guilty by and strikes dead the innocent and unoffending?

And since the birth-time of the world and first day of being to sea and earth and the formation of the sun many bodies have been added from without, many seeds added all round, which the great universe in tossing to and fro has contributed; that from them the sea and lands might increase and from them heaven's

mansion might enlarge its expanse and raise its high vaults far above earth, and that air might rise up around. For all bodies from all quarters are assigned by blows each to its appropriate thing and all withdraw to their proper classes; moisture passes to moisture, from an earthy body earth increases and fires forge fires and ether ether, until nature parent of things with finishing hand has brought all things on to their utmost limit of growth. And this comes to pass when that which is infused into the life-arteries is no more than that which ebbs from them and withdraws: at this point the life-growth in all things must stop, at this point nature by her powers checks further increase. For whatever things you see grow in size with joyous increase and mount by successive steps to mature age, take to themselves more bodies than they discharge from themselves, while food is readily infused into all the arteries and the things are not so widely spread out as to throw off many particles and occasion more waste than their age can take in as nourishment. For no doubt it must be conceded that many bodies ebb away and withdraw from things; but still more must join them, until they have touched the utmost point of growth. Then piece by piece age breaks their powers and matured strength and wastes away on the side of decay. For the larger a thing is and the wider, as soon as its growth is stopped, at once it sheds abroad and discharges from it more bodies in all directions round; and its food is not readily transmitted into all its arteries and is not enough, in proportion to the copious exhalations which the thing throws off, to enable a like amount to rise up and be supplied. For food must keep all things entire by renewing them, food must uphold, food sustain all things: all in vain, since the arteries refuse to hold what is sufficient, and nature does not furnish the needful amount. With good reason therefore all things perish, when they have been rarefied by the ebb of particles and succumb to blows from without, since food sooner or later fails advanced age, and bodies never cease to destroy a thing by thumping it from without and to overpower it by aggressive blows. In this way then the walls too of the great world around shall be stormed and fall to decay and crumbling ruin. Yes and even now the age is enfeebled and the earth exhausted by bearing scarce produces little living creatures, she who produced all

races and gave birth to the huge bodies of wild beasts. For methinks no golden chain let down to earth from heaven above the races of mortal beings, nor did the sea and waves which lash the rocks produce them, but the same earth bare them which now feeds them out of herself. Moreover she first spontaneously of herself produced for mortals goodly corn-crops and joyous vineyards; of herself gave sweet fruits and glad pastures; which now-a-days scarce attain any size when furthered by our labour: we exhaust the oxen and the strength of the husbandmen; we wear out our iron, scarcely fed after all by the tilled fields; so niggardly are they of their produce and after so much labour do they let it grow. And now the aged ploughman shakes his head and sighs again and again to think that the labours of his hands have come to nothing; and when he compares present times with times past, he often praises the fortunes of his sire [and harps on the theme, how the men of old rich in piety comfortably supported life on a scanty plot of ground, since the allotment of land to each man was far less of yore than now.] The sorrowful planter too of the exhausted and shrivelled vine impeaches the march of time and wearies heaven, and comprehends not that all things are gradually wasting away and passing to the grave, quite forspent by age and length of days.

LUCRETIUS

ON THE NATURE OF THINGS

BOOK THIRD

Thee, who first wast able amid such thick darkness to raise on high so bright a beacon and shed a light on the true interests of life, thee I follow, glory of the Greek race, and plant now my footsteps firmly fixed in thy imprinted marks, not so much from a desire to rival thee as that from the love I bear thee I yearn to imitate thee; for why need the swallow contend with swans, or what likeness is there between the feats of racing performed by kids with tottering limbs and by the powerful strength of the horse? Thou, father, art discoverer of things, thou furnishest us with fatherly precepts, and like as bees sip of all things in the flowery lawns, we, o glorious being, in like manner feed from out thy pages upon all the golden maxims, golden I say, most worthy ever of endless life. For soon as thy philosophy issuing from a godlike intellect has begun with loud voice to proclaim the nature of things, the terrors of the mind are dispelled, the walls of the world part asunder, I see things in operation throughout the whole void: the divinity of the gods is revealed and their tranquil abodes which neither winds do shake nor clouds drench with rains nor snow congealed by sharp frosts harms with hoary fall: an ever cloudless ether o'ercanopies them, and they laugh with light shed largely round. Nature too supplies all their wants and nothing ever impairs their peace of mind. But on the other hand the Acherusian quarters are nowhere to be seen, though earth is no bar to all things being descried, which are in operation underneath our feet throughout the void. At all this a kind of godlike delight mixed with shuddering awe comes

over me to think that nature by thy power is laid thus visibly open, is thus unveiled on every side.

Begin ...And now since I have shewn what-like the beginnings of all things are and how diverse with varied shapes as they fly spontaneously driven on in everlasting motion, and how all things can be severally produced out of these, next after these questions the nature of the mind and soul should methinks be cleared up by my verses and that dread of Acheron be driven headlong forth, troubling as it does the life of man from its inmost depths and overspreading all things with the blackness of death, allowing no pleasure to be pure and unalloyed. For as to what men often give out that diseases and a life of shame are more to be feared than Tartarus place of death, and that they know the soul to be of blood or it may be of wind, if haply their choice so direct, and that they have no need at all of our philosophy, you may perceive for the following reasons that all these boasts are thrown out more for glory's sake than because the thing is really believed. These very men, exiles from their country and banished far from the sight of men, live degraded by foul charge of guilt, sunk in a word in every kind of misery, and whithersoever the poor wretches are come, they yet do offer sacrifices to the dead and slaughter black sheep and make libations to the gods manes and in times of distress turn their thoughts to religion much more earnestly. Wherefore you can better test the man in doubts and dangers and mid adversity learn who he is; for then and not till then the words of truth are forced out from the bottom of his heart: the mask is torn off, the reality is left. Avarice again and blind lust of honours which constrain unhappy men to overstep the bounds of right and sometimes as partners and agents of crimes to strive night and day with surpassing effort to struggle up to the summit of power,—these sores of life are in no small measure fostered by the dread of death. For foul scorn and pinching want in every case are seen to be far removed from a life of pleasure and security and to be a loitering so to say before the gates of death. And while men driven on by an unreal dread wish to escape far away from these and keep them far from them, they amass wealth by civil bloodshed and greedily double their riches piling up murder on murder; cruelly triumph in the sad death of a brother and hate and fear the tables of kinsfolk. Often like-

wise from the same fear envy causes them to pine: they make moan that before their very eyes he is powerful, he attracts attention, who walks arrayed in gorgeous dignity, while they are wallowing in darkness and dirt. Some wear themselves to death for the sake of statues and a name. And often to such a degree through dread of death does hate of life and of the sight of daylight seize upon mortals, that they commit self-murder with a sorrowing heart, quite forgetting that this fear is the source of their cares, [~~this fear which urges men to every sin~~], prompts this one to put all shame to rout, another to burst asunder the bonds of friendship, and in fine to overturn duty from its very base; since often ere now men have betrayed country and dear parents in seeking to shun the Acherusian quarters. For even as children are flurried and dread all things in the thick darkness, thus we in the daylight fear at times things not a whit more to be dreaded than what children shudder at in the dark and fancy sure to be. This terror therefore and darkness of mind must be dispelled not by the rays of the sun and glittering shafts of day, but by the aspect and law of nature.

First then I say that the mind which we often call the understanding, in which dwells the directing and governing principle of life, is no less part of the man, than hand and foot and eyes are parts of the whole living creature. [Some however affirm] that the sense of the mind does not dwell in a distinct part, but is a certain vital state of the body, which the Greeks call harmonia, because by it, they say, we live with sense, though the understanding is in no one part; just as when good health is said to belong to the body, though yet it is not any one part of the man in health. In this way they do not assign a distinct part to the sense of the mind; in all which they appear to me to be grievously at fault in more ways than one. Oftentimes the body which is visible to sight, is sick, while yet we have pleasure in another hidden part; and oftentimes the case is the very reverse, the man who is unhappy in mind feeling pleasure in his whole body; just as if, while a sick man's foot is pained, the head meanwhile should be in no pain at all. Moreover when the limbs are consigned to soft sleep and the burdened body lies diffused without sense, there is yet a something else in us which during

that time is moved in many ways and admits into it all the motions of joy and unreal cares of the heart. Now that you may know that the soul as well is in the limbs and that the body is not wont to have sense by any harmony, this is a main proof: when much of the body has been taken away, still life often stays in the limbs; and yet the same life, when a few bodies of heat have been dispersed abroad and some air has been forced out through the mouth, abandons at once the veins and quits the bones: by this you may perceive that all bodies have not functions of like importance nor alike uphold existence, but rather that those seeds which constitute wind and heat, cause life to stay in the limbs. Therefore vital heat and wind are within the body and abandon our frame at death. Since then the nature of the mind and that of the soul have been proved to be a part as it were of the man, surrender the name of harmony, whether brought down to musicians from high Helicon, or whether rather they have themselves taken it from something else and transferred it to that thing which then was in need of a distinctive name; whatever it be, let them keep it: do you take in the rest of my precepts.

Now I assert that the mind and the soul are kept together in close union and make up a single nature, but that the directing principle which we call mind and understanding, is the head so to speak and reigns paramount in the whole body. It has a fixed seat in the middle region of the breast: here throb fear and apprehension, about these spots dwell soothing joys; therefore here is the understanding or mind. All the rest of the soul disseminated through the whole body obeys and moves at the will and inclination of the mind. It by itself alone knows for itself, rejoices for itself, at times when the impression does not move either soul or body together with it. And as when some part of us, the head or the eye, suffers from an attack of pain, we do not feel the anguish at the same time over the whole body, thus the mind sometimes suffers pain by itself or is inspirited with joy, when all the rest of the soul throughout the limbs and frame is stirred by no novel sensation. But when the mind is excited by some more vehement apprehension, we see the whole soul feel in unison through all the limbs, sweats and paleness spread over the whole body, the tongue falter, the voice die away, a mist

cover the eyes, the ears ring, the limbs sink under one; in short we often see men drop down from terror of mind; so that anybody may easily perceive from this that the soul is closely united with the mind, and, when it has been smitten by the influence of the mind, forthwith pushes and strikes the body.

This same principle teaches that the nature of the mind and soul is bodily; for when it is seen to push the limbs, rouse the body from sleep, and alter the countenance and guide and turn about the whole man, and when we see that none of these effects can take place without touch nor touch without body, must we not admit that the mind and the soul are of a bodily nature? Again you perceive that our mind in our body suffers together with the body and feels in unison with it. When a weapon with a shudder-causing force has been driven in and has laid bare bones and sinews within the body, if it does not take life, yet there ensues a faintness and a lazy sinking to the ground and on the ground the turmoil of mind which arises, and sometimes a kind of undecided inclination to get up. Therefore the nature of the mind must be bodily, since it suffers from bodily weapons and blows.

I will now go on to explain in my verses of what kind of body the mind consists and out of what it is formed. First of all I say that it is extremely fine and formed of exceedingly minute bodies. That this is so you may, if you please to attend, clearly perceive from what follows: nothing that is seen takes place with a velocity equal to that of the mind when it starts some suggestion and actually sets it agoing; the mind therefore is stirred with greater rapidity than any of the things whose nature stands out visible to sight. But that which is so passing nimble, must consist of seeds exceedingly round and exceedingly minute, in order to be stirred and set in motion by a small moving power. Thus water is moved and heaves by ever so small a force, formed as it is of small particles apt to roll. But on the other hand the nature of honey is more sticky, its liquid more sluggish and its movement more dilatory; for the whole mass of matter coheres more closely, because sure enough it is made of bodies not so smooth fine and round. A breeze however gentle and light can force, as you may see, a high heap of poppy seed to be blown away from the top downwards; but on the other hand eurus itself cannot move a

heap of stones. Therefore bodies possess a power of moving in proportion to their smallness and smoothness; and on the other hand the greater weight and roughness bodies prove to have, the more stable they are. Since then the nature of the mind has been found to be eminently easy to move, it must consist of bodies exceedingly small smooth and round. The knowledge of which fact, my good friend, will on many accounts prove useful and be serviceable to you. The following fact too likewise demonstrates how fine the texture is of which its nature is composed, and how small the room is in which it can be contained, could it only be collected into one mass: soon as the untroubled sleep of death has gotten hold of a man and the nature of the mind and soul has withdrawn, you can perceive then no diminution of the entire body either in appearance or weight: death makes all good save the vital sense and heat. Therefore the whole soul must consist of very small seeds and be inwoven through veins and flesh and sinews; inasmuch as, after it has all withdrawn from the whole body, the exterior contour of the limbs preserves itself entire and not a tittle of the weight is lost. Just in the same way when the flavour of wine is gone or when the delicious aroma of a perfume has been dispersed into the air or when the savour has left some body, yet the thing itself does not therefore look smaller to the eye, nor does aught seem to have been taken from the weight, because sure enough many minute seeds make up the savours and the odour in the whole body of the several things. Therefore, again and again I say, you are to know that the nature of the mind and the soul has been formed of exceedingly minute seeds, since at its departure it takes away none of the weight. . . .

We are not however to suppose that this nature is single. For a certain subtle spirit mixed with heat quits men at death, and then the heat draws air along with it; there being no heat which has not air too mixed with it: for since its nature is rare, many first-beginnings of air must move about through it. Thus the nature of the mind is proved to be threefold; and yet these things all together are not sufficient to produce sense; since the fact of the case does not admit that any of these can produce sense-giving motions and the thoughts which a man turns over in mind. Thus some fourth nature too must be added to these:

it is altogether without name; than it nothing exists more nimble or more fine, or of smaller or smoother elements: it first transmits the sense-giving motions through the frame; for it is first stirred, made up as it is of small particles; next the heat and the unseen force of the spirit receive the motions, then the air; then all things are set in action, the blood is stirred, every part of the flesh is filled with sensation; last of all the feeling is transmitted to the bones and marrow, whether it be one of pleasure or an opposite excitement. No pain however can lightly pierce thus far nor any sharp malady make its way in, without all things being so thoroughly disordered that no room is left for life and the parts of the soul fly abroad through all the pores of the body. But commonly a stop is put to these motions on the surface as it were of the body: for this reason we are able to retain life.

Now though I would fain explain in what way these are mixed up together, by what means united, when they exert their powers, the poverty of my native speech deters me sorely against my will: yet will I touch upon them and in summary fashion to the best of my ability: the first-beginnings by their mutual motions are interlaced in such a way that none of them can be separated by itself, nor can the function of any go on divided from the rest by any interval; but they are so to say the several powers of one body. Even so in any flesh of living creature you please without exception there is smell and some colour and a savour, and yet out of all these is made up one single bulk of body. Thus the heat and the air and the unseen power of the spirit mixed together produce a single nature, together with that nimble force which transmits to them from itself the origin of motion; by which means sense-giving motion first takes its rise through the fleshly frame. For this nature lurks secreted in its inmost depths, and nothing in our body is farther beneath all ken than it, and more than this it is the very soul of the whole soul. Just in the same way as the power of the mind and the function of the soul are latent in our limbs and throughout our body, because they are each formed of small and few bodies: even so, you are to know, this nameless power made of minute bodies is concealed and is moreover the very soul so to say of the whole soul, and reigns supreme in the whole body. On a like principle the spirit and air and heat must, as they exert their powers, be mixed up together through the

frame, and one must ever be more out of view or more prominent than another, that a single substance may be seen to be formed from the union of all, lest the heat and spirit apart by themselves and the power of the air apart by itself should destroy sense and dissipate it by their disunion. Thus the mind possesses that heat which it displays when it boils up in anger and fire flashes from the keen eyes; there is too much cold spirit comrade of fear, which spreads a shivering over the limbs and stirs the whole frame; yes and there is also that condition of still air which has place when the breast is calm and the looks cheerful. But they have more of the hot whose keen heart and passionate mind lightly boil up in anger. Foremost in this class comes the fierce violence of lions who often as they chafe break their hearts with their roaring and cannot contain within their breast the billows of their rage. Then the chilly mind of stags is fuller of the spirit and more quickly rouses through all the flesh its icy currents which cause a shivering motion to pass over the limbs. But the nature of oxen has its life rather from the still air, and never does the smoky torch of anger applied to it stimulate it too much, shedding over it the shadow of murky gloom, nor is it transfixed and stiffened by the icy shafts of fear: it lies between the other two, stags and cruel lions. And thus it is with mankind: however much teaching renders some equally refined, it yet leaves behind those earliest traces of the nature of each mind; and we are not to suppose that evil habits can be so thoroughly plucked up by the roots, that one man shall not be more prone than another to keen anger, a second shall not be somewhat more quickly assailed by fear, a third shall not take some things more meekly than is right. In many other points there must be differences between the varied natures of men and the tempers which follow upon these; though at present I am unable to set forth the hidden causes of these or to find names enough for the different shapes which belong to the first-beginnings, from which shapes arises this diversity of things. What herein I think I may affirm is this: traces of the different natures left behind, which reason is unable to expel from us, are so exceedingly slight that there is nothing to hinder us from living a life worthy of gods.

Well this nature is contained by the whole body and is in turn the body's guardian and the cause of its existence; for the two

adhere together with common roots and cannot it is plain be riven asunder without destruction. Even as it is not easy to pluck the perfume out of lumps of frankincense without quite destroying its nature as well; so it is not easy to withdraw from the whole body the nature of the mind and soul without dissolving all alike. With first-beginnings so interlaced from their earliest birth are they formed and gifted with a life of joint partnership, and it is plain that the faculty of the body and of the mind cannot feel separately, each alone without the other's power, but sense is kindled throughout our flesh and blown into flame between the two by the joint motions on the part of both. Moreover the body by itself is never either begotten or grows or, it is plain, continues to exist after death. For not in the way that the liquid of water often loses the heat which has been given to it, yet is not for that reason itself riven in pieces, but remains unimpaired,—not in this way, I say, can the abandoned frame endure the separation of the soul, but riven in pieces it utterly perishes and rots away. Thus the mutual connexions of body and soul from the first moment of their existence learn the vital motions even while hid in the body and womb of the mother, so that no separation can take place without mischief and ruin. Thus you may see that, since the cause of existence lies in their joint action, their nature too must be a joint nature.

Furthermore if any one tries to disprove that the body feels and believes that the soul mixed through the whole body takes upon it this motion which we name sense, he combats even manifest and undoubted facts. For who will ever bring forward any explanation of what the body's feeling is, except that which the plain fact of the case has itself given and taught to us? But when the soul it is said has departed, the body throughout is without sense; yes, for it loses what was not its own peculiar property in life; ay and much else it loses, before that soul is driven out of it.

Again to say that the eyes can see no object, but that the soul discerns through them as through an open door, is far from easy, since their sense contradicts this; for this sense e'en draws it and forces it out to the pupil: nay often we are unable to perceive shining things, because our eyes are embarrassed by the lights. But this is not the case with doors; for, because we ourselves see,

the open doors do not therefore undergo any fatigue. Again if our eyes are in the place of doors, in that case when the eyes are removed the mind ought it would seem to have more power of seeing things, after doors, jambs and all, have been taken out of the way.

And herein you must by no means adopt the opinion which the revered judgment of the worthy man Democritus lays down, that the first-beginnings of body and mind placed together in successive layers come in alternate order and so weave the tissue of our limbs. For not only are the elements of the soul much smaller than those of which our body and flesh are formed, but they are also much fewer in number and are disseminated merely in scanty number through the frame, so that you can warrant no more than this: the first-beginnings of the soul keep spaces between them at least as great as are the smallest bodies which, if thrown upon it, are first able to excite in our body the sense-giving motions. Thus at times we do not feel the adhesion of dust when it settles on our body, nor the impact of chalk when it rests on our limbs, nor do we feel a mist at night nor a spider's slender threads as they come against us, when we are caught in its meshes in moving along, nor the same insect's flimsy web when it has fallen on our head, nor the feathers of birds and down of plants as it flies about, which commonly from exceeding lightness does not lightly fall, nor do we feel the tread of every creeping creature whatsoever nor each particular foot-print which gnats and the like stamp on our body. So very many first-beginnings must be stirred in us, before the seeds of the soul mixed up in our bodies feel that these have been disturbed, and by thumping with such spaces between can clash unite and in turn recoil.

The mind has more to do with holding the fastnesses of life and has more sovereign sway over it than the power of the soul. For without the understanding and the mind no part of the soul can maintain itself in the frame the smallest fraction of time, but follows at once in the other's train and passes away into the air and leaves the cold limbs in the chill of death. But he abides in life whose mind and understanding continue to stay with him: though the trunk is mangled with its limbs shorn all round about it, after the soul has been taken away on all sides and been

severed from the limbs the trunk yet lives and inhales the ethereal airs of life. When robbed, if not of the whole, yet of a large portion of the soul, it still lingers in and cleaves to life; just as, after the eye has been lacerated all round if the pupil has continued uninjured, the living power of sight remains, provided always you do not destroy the whole ball of the eye and pare close round the pupil and leave only it; for that will not be done even to the ball without the entire destruction of the eye. But if that middle portion of the eye, small as it is, is eaten into, the sight is gone at once and darkness ensues, though a man have the bright ball quite unimpaired. On such terms of union soul and mind are ever bound to each other.

Now mark me: that you may know that the minds and light souls of living creatures have birth and are mortal, I will go on to set forth verses worthy of your attention, got together by long study and invented with welcome effort. Do you mind to link to one name both of them alike, and when for instance I shall choose to speak of the soul, shewing it to be mortal, believe that I speak of the mind as well, inasmuch as both make up one thing and are one united substance. First of all then since I have shewn the soul to be fine and to be formed of minute bodies and made up of much smaller first-beginnings than is the liquid of water or mist or smoke:—for it far surpasses these in nimbleness and is moved, when struck by a far slenderer cause; inasmuch as it is moved by images of smoke and mist; as when for instance sunk in sleep we see altars steam forth their heat and send up their smoke on high; for beyond a doubt images are begotten for us from these things:—well then since you see on the vessels being shattered the water flow away on all sides, and since mist and smoke pass away into air, believe that the soul too is shed abroad and perishes much more quickly and dissolves sooner into its first bodies, when once it has been taken out of the limbs of a man and has withdrawn. For, when the body that serves for its vessel cannot hold it, if shattered from any cause and rarefied by the withdrawal of blood from the veins, how can you believe that this soul can be held by any air? how can that air which is rarer than our body hold it in?

Again we perceive that the mind is begotten along with

the body and grows up together with it and becomes old along with it. For even as children go about with a tottering and weakly body, so slender sagacity of mind follows along with it; then when their life has reached the maturity of confirmed strength, the judgment too is greater and the power of the mind more developed. Afterwards when the body has been shattered by the mastering might of time and the frame has drooped with its forces dulled, then the intellect halts, the tongue dotes, the mind gives way, all faculties fail and are found wanting at the same time. It naturally follows then that the whole nature of the soul is dissolved, like smoke, into the high air; since we see it is begotten along with the body and grows up along with it and, as I have shewn, breaks down at the same time worn out with age.

3 Moreover we see that even as the body is liable to violent diseases and severe pain, so is the mind to sharp cares and grief and fear; it naturally follows therefore that it is its partner in
4 death as well. Again in diseases of the body the mind often wanders and goes astray; for it loses its reason and drivels in its speech and often in a profound lethargy is carried into deep and never-ending sleep with drooping eyes and head; out of which it neither hears the voices nor can recognise the faces of those who stand round calling it back to life and bedewing with tears face and cheeks. Therefore you must admit that the mind too dissolves, since the infection of disease reaches to it; for pain and disease are both forgers of death: a truth we have
5 fully learned ere now by the death of many. Again, when the pungent strength of wine has entered into a man and its spirit has been infused into and transmitted through his veins, why is it that a heaviness of the limbs follows along with this, his legs are hampered as he reels about, his tongue falters, his mind is besotted, his eyes swim, shouting hiccuping wranglings are rife, together with all the other usual concomitants, why is all this, if not because the overpowering violence of the wine is wont to disorder the soul within the body? But whenever things can be disordered and hampered, they give token that if a somewhat more potent cause gained an entrance, they would
6 perish and be robbed of all further existence. Moreover it often happens that some one constrained by the violence of disease

suddenly drops down before our eyes, as by a stroke of lightning, and foams at the mouth, moans and shivers through his frame, loses his reason, stiffens his muscles, is racked, gasps for breath fitfully, and wearies his limbs with tossing. Sure enough, because the violence of the disease spreads itself through his frame and disorders him, he foams as he tries to eject his soul, just as in the salt sea the waters boil with the mastering might of the winds. A moan too is forced out, because the limbs are seized with pain, and mainly because seeds of voice are driven forth and are carried in a close mass out by the mouth, the road which they are accustomed to take and where they have a well-paved way. Loss of reason follows, because the powers of the mind and soul are disordered and, as I have shewn, are riven and forced asunder, torn to pieces by the same baneful malady. Then after the cause of the disease has bent its course back and the acrid humours of the distempered body return to their hiding-places, then he first gets up like one reeling, and by little and little comes back into full possession of his senses and regains his soul. Since therefore even within the body mind and soul are harassed by such violent distempers and so miserably racked by sufferings, why believe that they without the body in the open
air can continue existence battling with fierce winds? And since 7
we perceive that the mind is healed like the sick body, and we see that it can be altered by medicine, this too gives warning that the mind has a mortal existence. For it is natural that whosoever essays and attempts to change the mind or seeks to alter any other nature you like, should add new parts or change the arrangement of the present, or withdraw in short some tittle from the sum. But that which is immortal wills not to have its parts transposed nor any addition to be made nor one tittle to ebb away; for whenever a thing changes and quits its proper limits, this change is at once the death of that which was before. Therefore the mind, whether it is sick or whether it is altered by medicine, alike, as I have shewn, gives forth mortal symptoms. So invariably is truth found to make head against false reason and to cut off all retreat from the assailant and by a two-fold refutation to put falsehood to rout.

Again we often see a man pass gradually away and limb by 8
limb lose vital sense; first the toes of his feet and the nails

turn livid, then the feet and shanks die, then next the steps of chilly death creep with slow pace over the other members. Therefore since the nature of the soul is rent and passes away and does not at one time stand forth in its entireness, it must be reckoned mortal. But if haply you suppose that it can draw itself in through the whole frame and mass its parts together and in this way withdraw sense from all the limbs, yet then that spot into which so great a store of soul is gathered, ought to shew itself in possession of a greater amount of sense. But as this is nowhere found, sure enough as we said before, it is torn in pieces and scattered abroad, and therefore dies. Moreover if I were pleased for the moment to grant what is false and admit that the soul might be collected in one mass in the body of those who leave the light dying piecemeal, even then you must admit the soul to be mortal; and it makes no difference whether it perish dispersed in air, or gathered into one lump out of all its parts lose all feeling, since sense ever more and more fails the whole man throughout and less and less of life remains throughout.

And since the mind is one part of a man which remains fixed in a particular spot, just as are the ears and eyes and the other senses which guide and direct life; and just as the hand or eye or nose when separated from us cannot feel and exist apart, but in however short a time wastes away in putrefaction, thus the mind cannot exist by itself without the body and the man's self which as you see serves for the mind's vessel or any thing else you choose to imagine which implies a yet closer union with it, since the body is attached to it by the nearest ties.

Again the quickened powers of body and mind by their joint partnership enjoy health and life; for the nature of the mind cannot by itself alone without the body give forth vital motions nor can the body again bereft of the soul continue to exist and make use of its senses: just, you are to know, as the eye itself torn away from its roots cannot see anything when apart from the whole body, thus the soul and mind cannot it is plain do anything by themselves. Sure enough, because mixed up through veins and flesh, sinews and bones, their first-beginnings are confined by all the body and are not free to bound

away leaving great spaces between, therefore thus shut in they make those sense-giving motions which they cannot make after death when forced out of the body into the air by reason that they are not then confined in a like manner; for the air will be a body and a living thing, if the soul shall be able to keep itself together and to enclose in it those motions which it used before to perform in the sinews and within the body. Moreover even while it yet moves within the confines of life, often the soul shaken from some cause or other is seen to wish to pass out and be loosed from the whole body, the features are seen to droop as at the last hour and all the limbs to sink flaccid over the bloodless trunk: just as happens, when the phrase is used, the mind is in a bad way, or the soul is quite gone; when all is hurry and every one is anxious to keep from parting the last tie of life; for then the mind and the power of the soul are shaken throughout and both are quite loosened together with the body; so that a cause somewhat more powerful can quite break them up. Why doubt, I would ask, that the soul when driven forth out of the body, when in the open air, feeble as it is, stript of its covering, not only cannot continue through eternity, but is unable to hold together the smallest fraction of time? Therefore, again and again I say, when the enveloping body has been all broken up and the vital airs have been forced out, you must admit that the senses of the mind and the soul are dissolved, since the cause of destruction is one and inseparable for both body and soul.

Again since the body is unable to bear the separation of the soul without rotting away in a noisome stench, why doubt that the power of the soul gathering itself up from the inmost depths of body has oozed out and dispersed like smoke, and that the crumbling body has changed and tumbled in with so total a ruin for this reason because its foundations throughout are stirred from their places, the soul oozing out abroad through the frame, through all the winding passages which are in the body, and all openings? so that in ways manifold you may learn that the nature of the soul has been divided piecemeal and gone forth throughout the frame, and that it has been torn to shreds within the body, ere it glided forth and swam out into the air. For no one when dying appears to feel the soul go forth entire from his

whole body or first mount up to the throat and gullet, but all feel it fail in that part which lies in a particular quarter; just as they know that the senses as well suffer dissolution each in its own place. But if our mind were immortal, it would not when dying complain so much of its dissolution, as of passing abroad and quitting its vesture, like a snake.

Again why are the mind's understanding and judgment never begotten in the head or feet or hands, but cling in all alike to one spot and fixed quarter, if it be not that particular places are assigned for the birth of every thing, and [nature has determined] where each is to continue to exist after it is born? [Our body then must follow the same law] and have such a manifold organisation of parts, that no perverted arrangement of its members shall ever shew itself: so invariably effect follows cause, nor is flame wont to be born in rivers nor cold in fire.

Again if the nature of the soul is immortal and can feel when separated from our body, methinks we must suppose it to be provided with five senses; and in no other way can we picture to ourselves souls below flitting about Acheron. Painters therefore and former generations of writers have thus represented souls provided with senses. But neither eyes nor nose nor hand can exist for the soul apart from the body nor can tongue, nor can ears perceive by the sense of hearing or exist for the soul by themselves apart from the body.

And since we perceive that vital sense is in the whole body and we see that it is all endowed with life, if on a sudden any force with swift blow shall have cut it in twain so as quite to dissever the two halves, the power of the soul will without doubt at the same time be cleft and cut asunder and dashed in twain together with the body. But that which is cut and divides into any parts, you are to know disclaims for itself an everlasting nature. Stories are told how scythed chariots reeking with indiscriminate slaughter often lop off limbs so instantaneously that that which has fallen down lopped off from the frame is seen to quiver on the ground, while yet the mind and faculty of the man from the suddenness of the mischief cannot feel the pain; and because his mind once for all is wholly given to the business of fighting, with what remains of his body he mingles in the fray and carnage, and often perceives not that the wheels and devouring scythes have carried off among the horses' feet his left arm shield and all; another sees not that his right arm has dropped from him, while he mounts and presses forward. Another tries to get up after he has lost his leg, while the dying foot quivers with its toes on the ground close by. The head too when cut off from the warm and living trunk retains on the ground the expression of life and open eyes, until it has yielded up all the remnants of soul. To take another case, if, as a serpent's tongue is quivering, as its tail is darting out from its long body, you choose to chop with an axe into many pieces both [tail and body], you will see all the separate portions thus cut off writhing under the fresh wound and bespattering the earth with gore, the fore part with the mouth making for its own hinder part, to allay with burning bite the pain of the wound with which it has been smitten. Shall we say then that there are entire souls in all those pieces? why from that argument it will follow that one living creature had many souls in its body; and this being absurd, therefore the soul which was one has been divided together with the body; therefore each alike must be reckoned mortal, since each is alike chopped up into many pieces.

Again if the nature of the soul is immortal and makes its way into our body at the time of birth, why are we unable to remember besides the time already gone, and why do we retain no traces of past actions? If the power of the mind has been so completely changed, that all remembrance of past things is lost, that methinks differs not widely from death; therefore you must admit that the soul which was before has perished and that which now is has now been formed.

Again if the quickened power of the mind is wont to be put into us after our body is fully formed, at the instant of our birth and our crossing the threshold of life, it ought agreeably to this to live not in such a way as to seem to have grown with the body and together with its members within the blood, but as in a den apart by and to itself: the very contrary to what undoubted fact teaches; for it is so closely united with the body throughout the veins flesh sinews and bones, that the very teeth have a share of sense; as their aching proves and the sharp twinge of cold water and the crunching of a rough stone, when it has got into them out of bread. Wherefore, again and again I say, we must believe

souls to be neither without a birth nor exempted from the law of death; for we must not believe that they could have been so completely united with our bodies, if they found their way into them from without, nor, since they are so closely inwoven with them, does it appear that they can get out unharmed and unloose themselves unscathed from all the sinews and bones and joints. But if haply you believe that the soul finds its way in from without and is wont to ooze through all our limbs, so much the more it will perish thus blended with the body; for what oozes through another is dissolved, and therefore dies. As food distributed through all the cavities of the body, while it is transmitted into the limbs and the whole frame, is destroyed and furnishes out of itself the matter of another nature, thus the soul and mind, though they pass entire into a fresh body, yet in oozing through it are dissolved, whilst there are transmitted so to say into the frame through all the cavities those particles of which this nature of mind is formed, which now is sovereign in our body, being born out of that soul which then perished when dispersed through the frame. Wherefore the nature of the soul is seen to be neither without a birthday nor exempt from death.

Again are seeds of the soul left in the dead body or not? If they are left and remain in it, the soul cannot fairly be deemed immortal, since it has withdrawn lessened by the loss of some parts; but if when taken away from the yet untainted limbs it has fled so entirely away as to leave in the body no parts of itself, whence do carcases exude worms from the now rank flesh and whence does such a swarm of living things, boneless and bloodless, surge through the heaving frame? But if haply you believe that souls find their way into worms from without and can severally pass each into a body and you make no account of why many thousands of souls meet together in a place from which one has withdrawn, this question at least must, it seems, be raised and brought to a decisive test, whether souls hunt out the several seeds of worms and build for themselves a place to dwell in, or find their way into bodies fully formed so to say. But why they should on their part make a body or take such trouble, cannot be explained; since being without a body they are not plagued as they flit about with diseases and cold and hunger, the body being more akin to, more troubled by such infirmities, and by its contact with it the mind suffering many ills. Nevertheless be it ever so expedient for them to make a body, when they are going to enter, yet clearly there is no way by which they can do so. Therefore souls do not make for themselves bodies and limbs; no nor can they by any method find their way into bodies after they are fully formed; for they will neither be able to unite themselves with a nice precision nor will any connexion of mutual sensation be formed between them.

Again why does untamed fierceness go along with the sullen brood of lions, cunning with foxes and proneness to flight with stags? and to take any other instance of the kind, why are all qualities engendered in the limbs and temper from the very commencement of life, if not because a fixed power of mind derived from its proper seed and breed grows up together with the whole body? If it were immortal and wont to pass into different bodies, living creatures would be of interchangeable dispositions; a dog of Hyrcanian breed would often fly before the attack of an antlered stag, a hawk would cower in mid air as it fled at the approach of a dove, men would be without reason, the savage races of wild beasts would have reason. For the assertion that an immortal soul is altered by a change of body is advanced on a false principle. What is changed is dissolved, and therefore dies: the parts are transposed and quit their former order; therefore they must admit of being dissolved too throughout the frame, in order at last to die one and all together with the body. But if they shall say that souls of men always go into human bodies, I yet will ask how it is a soul can change from wise to foolish, and no child has discretion, and why the mare's foal is not so well trained as the powerful strength of the horse. You may be sure they will fly to the subterfuge that the mind grows weakly in a weakly body. But granting this is so, you must admit the soul to be mortal, since changed so completely throughout the frame it loses its former life and sense. Then too in what way will it be able to grow in strength uniformly with its allotted body and reach the coveted flower of age, unless it shall be its partner at its first beginning? or what means it by passing out from the limbs when decayed with age? does it fear to remain shut up in a crumbling body, fear that its tenement, worn

out by protracted length of days, bury it in its ruins? Why an immortal being incurs no risks.

Again for souls to stand by at the unions of Venus and the birth-throes of beasts seems to be passing absurd, for them the immortals to wait for mortal limbs in number numberless and struggle with one another in forward rivalry, which shall first and by preference have entrance in; unless haply bargains are struck among the souls on these terms, that whichever in its flight shall first come up, shall first have right of entry, and that they shall make no trial at all of each other's strength.

Again a tree cannot exist in the ether, nor clouds in the deep sea nor can fishes live in the fields nor blood exist in woods nor sap in stones. Where each thing can grow and abide is fixed and ordained. Thus the nature of the mind cannot come into being alone without the body nor exist far away from the sinews and blood. But if (for this would be much more likely to happen than that) the force itself of the mind might be in the head or shoulders or heels or might be born in any other part of the body, it would after all be wont to abide in one and the same man or vessel. But since in our body even it is fixed and seen to be ordained where the soul and the mind can severally be and grow, it must still more strenuously be denied that it can abide and be born out of the body altogether. Therefore when the body has died, we must admit that the soul has perished, wrenched away throughout the body. To link forsooth a mortal thing with an everlasting and suppose that they can have sense in common and can be reciprocally acted upon, is sheer folly; for what can be conceived more incongruous, more discordant and inconsistent with itself, than a thing which is mortal, linked with an immortal and everlasting thing, trying in such union to weather furious storms? But if haply the soul is to be accounted immortal for this reason rather, because it is kept sheltered from death-bringing things, either because things hostile to its existence do not approach at all, or because those which do approach, in some way or other retreat discomfited before we can feel the harm they do, [manifest experience proves that this can not be true]. For besides that it sickens in sympathy with the maladies of the body, it is often attacked by that which frets it on the score of the future and keeps it on the rack of suspense and wears

it out with cares; and when ill deeds are in the past, remorse for sins yet gnaws: then there is madness peculiar to the mind and forgetfulness of all things; then too it often sinks into the black waters of lethargy.

Death therefore to us is nothing, concerns us not a jot, since the nature of the mind is proved to be mortal; and as in time gone by we felt no distress, when the Poeni from all sides came together to do battle, and all things shaken by war's troublous uproar shuddered and quaked beneath high heaven, and mortal men were in doubt which of the two peoples it should be to whose empire all must fall by sea and land alike, thus when we shall be no more, when there shall have been a separation of body and soul, out of both of which we are each formed into a single being, to us, you may be sure, who then shall be no more, nothing whatever can happen to excite sensation, not if earth shall be mingled with sea and sea with heaven. And even supposing the nature of the mind and power of the soul do feel, after they have been severed from our body, yet that is nothing to us who by the binding tie of marriage between body and soul are formed each into one single being. And if time should gather up our matter after our death and put it once more into the position in which it now is, and the light of life be given to us again, this result even would concern us not at all, when the chain of our self-consciousness has once been snapped asunder. So now we give ourselves no concern about any self which we have been before, nor do we feel any distress on the score of that self. For when you look back on the whole past course of immeasurable time and think how manifold are the shapes which the motions of matter take, you may easily credit this too, that these very same seeds of which we now are formed, have often before been placed in the same order in which they now are; and yet we cannot recover this in memory: a break in our existence has been interposed, and all the motions have wandered to and fro far astray from the sensations they produced. For he whom evil is to befal, must in his own person exist at the very time it comes, if the misery and suffering are haply to have any place at all; but since death precludes this, and forbids him to be, upon whom the ills can be brought, you may be sure that we have nothing to fear after death, and

that he who exists not, cannot become miserable, and that it matters not a whit whether he has been born into life at any other time, when immortal death has taken away his mortal life.

Therefore when you see a man bemoaning his hard case, that after death he shall either rot with his body laid in the grave or be devoured by flames or the jaws of wild beasts, you may be sure that his ring betrays a flaw and that there lurks in his heart a secret goad, though he himself declare that he does not believe that any sense will remain to him after death. He does not methinks really grant the conclusion which he professes to grant nor the principle on which he so professes, nor does he take and force himself root and branch out of life, but all unconsciously imagines something of self to survive. For when any one in life suggests to himself that birds and beasts will rend his body after death, he makes moan for himself: he does not separate himself from that self, nor withdraw himself fully from the body so thrown out, and fancies himself that other self and stands by and impregnates it with his own sense. Hence he makes much moan that he has been born mortal, and sees not that after real death there will be no other self to remain in life and lament to self that his own self has met death, and there to stand and grieve that his own self there lying is mangled or burnt. For if it is an evil after death to be pulled about by the devouring jaws of wild beasts, I cannot see why it should not be a cruel pain to be laid on fires and burn in hot flames, or to be placed in honey and stifled, or to stiffen with cold, stretched on the smooth surface of an icy slab of stone, or to be pressed down and crushed by a load of earth above.

'Now no more shall thy house admit thee with glad welcome, nor a most virtuous wife and sweet children run to be the first to snatch kisses and touch thy heart with a silent joy. No more mayst thou be prosperous in thy doings, a safeguard to thine own. One disastrous day has taken from thee luckless man in luckless wise all the many prizes of life'. This do men say; but add not thereto 'and now no longer does any craving for these things beset thee withal'. For if they could rightly perceive this in thought and follow up the thought in words, they would release themselves from great distress and appre-

hension of mind. 'Thou, even as now thou art, sunk in the sleep of death, shalt continue so to be all time to come, freed from all distressful pains; but we with a sorrow that would not be sated wept for thee, when close by thou didst turn to an ashen hue on thy appalling funeral pile, and no length of days shall pluck from our hearts our ever-during grief'. This question therefore should be asked of this speaker, what there is in it so passing bitter, if it come in the end to sleep and rest, that any one should pine in never-ending sorrow.

This too men often, when they have reclined at table cup in hand and shade their brows with crowns, love to say from the heart, 'short is this enjoyment for poor weak men; presently it will have been and never after may it be called back'. As if after their death it is to be one of their chiefest afflictions that thirst and parching drought is to burn them up hapless wretches, or a craving for any thing else is to beset them. What folly! no one feels the want of himself and life at the time when mind and body are together sunk in sleep; for all we care this sleep might be everlasting, no craving whatever for ourselves then moves us. And yet by no means do those first-beginnings through ·t our frame wander at that time far away from their sense-producing motions, at the moment when a man starts up from sleep and collects himself. Death therefore must be thought to concern us much less, if less there can be than what we see to be nothing; for a greater dispersion of the mass of matter follows after death, and no one wakes up, upon whom the chill cessation of life has once come.

Once more, if the nature of things could suddenly utter a voice and in person could rally any of us in such words as these, 'what hast thou, o mortal, so much at heart, that thou goest such lengths in sickly sorrows? why bemoan and bewail death? for say thy life past and gone has been welcome to thee and thy blessings have not all, as if they were poured into a perforated vessel, run through and been lost without avail: why not then take thy departure like a guest filled with life, and with resignation, thou fool, enter upon untroubled rest? but if all that thou hast enjoyed, has been squandered and lost, and life is a grievance, why seek to make any addition, to be wasted perversely in its turn and lost utterly without avail? why not

rather make an end of life and travail? for there is nothing more which I can contrive and discover for thee to give pleasure: all things are ever the same. Though thy body is not yet decayed with years nor thy frame worn out and exhausted, yet all things remain the same, ay though in length of life thou shouldst outlast all races of things now living, nay even more if thou shouldst never die', what answer have we to make save this, that nature sets up against us a well-founded claim and puts forth in her pleading a true indictment? If however one of greater age and more advanced in years should complain and lament, poor wretch, his death more than is right, would she not with greater cause raise her voice and rally him in sharp accents, 'away from this time forth with thy tears, rascal; a truce to thy complainings: thou decayest after full enjoyment of all the prizes of life. But because thou ever yearnest for what is not present, and despisest what is, life has slipped from thy grasp unfinished and unsatisfying, and or ever thou thoughtest, death has taken his stand at thy pillow, before thou canst take thy departure sated and filled with good things. Now, however resign all things unsuited to thy age, and with a good grace up and greatly go: thou must'. With good reason methinks she would bring her charge, with reason rally and reproach; for old things give way and are supplanted by new without fail, and one thing must ever be replenished out of other things; and no one is delivered over to the pit and black Tartarus: matter is needed for after generations to grow; all of which though will follow thee when they have finished their term of life; and thus it is that all these no less than thou have before this come to an end and hereafter will come to an end. Thus one thing will never cease to rise out of another, and life is granted to none in fee-simple, to all in usufruct. Think too how the bygone antiquity of everlasting time before our birth was nothing to us. Nature therefore holds this up to us as a mirror of the time yet to come after our death. Is there aught in this that looks appalling, aught that wears an aspect of gloom? is it not more untroubled than any sleep?

And those things sure enough, which are fabled to be in the deep of Acheron, do all exist for us in this life. No Tantalus, numbed by groundless terror, as the story is, fears poor

wretch a huge stone hanging in air; but in life rather a baseless dread of the gods vexes mortals: the fall they fear is such fall of luck as chance brings to each. Nor do birds eat a way into Tityos laid in Acheron, nor can they sooth to say find during eternity food to peck under his large breast. However huge the bulk of body he extends, though such as to take up with outspread limbs not nine acres merely, but the whole earth, yet will he not be able to endure everlasting pain and supply food from his own body for ever. But he is for us a Tityos, whom as he grovels in love vultures rend and bitter bitter anguish eats up or troubled thoughts from any other passion do rive. In life too we have a Sisyphus before our eyes who is bent on asking from the people the rods and cruel axes, and always retires defeated and disappointed. For to ask for power, which empty as it is is never given, and always in the chase of it to undergo severe toil, this is forcing up-hill with much effort a stone which after all rolls back again from the summit and seeks in headlong haste the levels of the plain. Then to be ever feeding the thankless nature of the mind, and never to fill it full and sate it with good things, as the seasons of the year do for us, when they come round and bring their fruits and varied delights, though after all we are never filled with the enjoyments of life, this methinks is to do what is told of the maidens in the flower of their age, to keep pouring water into a perforated vessel which in spite of all can never be filled full. Moreover Cerberus and the furies and yon privation of light [are idle tales, as well as all the rest, Ixion's wheel and black] Tartarus belching forth hideous fires from his throat: things which nowhere are nor sooth to say can be. But there is in life a dread of punishment for evil deeds, signal as the deeds are signal, and for atonement of guilt, the prison and the frightful hurling down from the rock, scourgings, executioners, the dungeon of the doomed, the pitch, the metal plate, torches; and even though these are wanting, yet the conscience-stricken mind through boding fears applies to itself goads and frightens itself with whips, and sees not meanwhile what end there can be of ills or what limit at last is to be set to punishments, and fears lest these very evils be enhanced after death. The life of fools at length becomes a hell here on earth.

This too you may sometimes say to yourself, 'even worthy Ancus has quitted the light with his eyes, who was far far better than thou, unconscionable man. And since then many other kings and kesars have been laid low, who lorded it over mighty nations. He too, even he who erst paved a way over the great sea and made a path for his legions to march over the deep and taught them to pass on foot over the salt pools and set at naught the roarings of the sea, trampling on them with his horses, had the light taken from him and shed forth his soul from his dying body. The son of the Scipios, thunderbolt of war, terror of Carthage, yielded his bones to earth just as if he were the lowest menial. Think too of the inventors of all sciences and graceful arts, think of the companions of the Heliconian maids; among whom Homer bore the sceptre without a peer, and he now sleeps the same sleep as others. Then there is Democritus who, when a ripe old age had warned him that the memory-waking motions of his mind were waning, by his own spontaneous act offered up his head to death. Even Epicurus passed away, when his light of life had run its course, he who surpassed in intellect the race of man and quenched the light of all, as the ethereal sun arisen quenches the stars. Wilt thou then hesitate and think it a hardship to die? thou for whom life is well nigh dead whilst yet thou livest and seest the light, who spendest the greater part of thy time in sleep and snorest wide awake and ceasest not to see visions and hast a mind troubled with groundless terror and canst not discover often what it is that ails thee, when besotted man thou art sore pressed on all sides with full many cares and goest astray tumbling about in the wayward wanderings of thy mind.

If, just as they are seen to feel that a load is on their mind which wears them out with its pressure, men might apprehend from what causes too it is produced and whence such a pile, if I may say so, of ill lies on their breast, they would not spend their life as we see them now for the most part do, not knowing any one of them what he means and wanting ever change of place as though he might lay his burden down. The man who is sick of home often issues forth from his large mansion, and as suddenly comes back to it, finding as he does that he is no better off abroad. He races to his country-house, driving his jennets

in headlong haste, as if hurrying to bring help to a house on fire: he yawns the moment he has reached the door of his house, or sinks heavily into sleep and seeks forgetfulness, or even in haste goes back again to town. In this way each man flies from himself, (but self from whom, as you may be sure is commonly the case, he cannot escape, clings to him in his own despite), hates too himself, because he is sick and knows not the cause of the malady; for if he could rightly see into this, relinquishing all else each man would study to learn the nature of things, since the point at stake is the condition for eternity, not for one hour, in which mortals have to pass all the time which remains for them to expect after death.

Once more what evil lust of life is this which constrains us with such force to be so mightily troubled in doubts and dangers? a sure term of life is fixed for mortals, and death cannot be shunned, but meet it we must. Moreover we are ever engaged, ever involved in the same pursuits, and no new pleasure is struck out by living on; but whilst what we crave is wanting, it seems to transcend all the rest; then, when it has been gotten, we crave something else, and ever does the same thirst of life possess us, as we gape for it open-mouthed. Quite doubtful it is what fortune the future will carry with it or what chance will bring us or what end is at hand. Nor by prolonging life do we take one tittle from the time past in death nor can we fret anything away, whereby we may haply be a less long time in the condition of the dead. Therefore you may complete as many generations as you please during your life; none the less however will that everlasting death await you; and for no less long a time will he be no more in being, who beginning with to-day has ended his life, than the man who has died many months and years ago.

LUCRETIUS

ON THE NATURE OF THINGS

BOOK FOURTH

I traverse the pathless haunts of the Pierides never yet trodden by sole of man. I love to approach the untasted springs and to quaff, I love to cull fresh flowers and gather for my head a distinguished crown from spots whence the muses have yet veiled the brows of none; first because I teach of great things and essay to release the mind from the fast bonds of religious scruples, and next because on a dark subject I pen such lucid verses o'erlaying all with the muses' charm. For that too would seem to be not without good grounds: even as physicians when they propose to give nauseous wormwood to children, first smear the rim round the bowl with the sweet yellow juice of honey, that the unthinking age of children may be fooled as far as the lips, and meanwhile drink up the bitter draught of wormwood and though beguiled yet not be betrayed, but rather by such means recover health and strength: so I now, since this doctrine seems generally somewhat bitter to those by whom it has not been handled, and the multitude shrinks back from it in dismay, have resolved to set forth to you our doctrine in sweet-toned Pierian verse and o'erlay it as it were with the pleasant honey of the muses, if haply by such means I might engage your mind on my verses, till such time as you apprehend all the nature of things and thoroughly feel what use it has.

And now that I have taught what the nature of the mind is and out of what things it is formed into one quickened being with the body, and how it is dissevered and returns into its first-beginnings, I will attempt to lay before you a truth which most

nearly concerns these questions, the existence of things which we call idols of things: these, like films peeled off from the surface of things, fly to and fro through the air, and do likewise frighten our minds when they present themselves to us awake as well as in sleep, what time we behold strange shapes and idols of the light-bereaved, which have often startled us in appalling wise as we lay relaxed in sleep: this I will essay, that we may not haply believe that souls break loose from Acheron or that shades fly about among the living or that something of us is left behind after death, when the body and the nature of the mind destroyed together have taken their departure into their several first-beginnings.

I say then that pictures of things and thin shapes are emitted from things off their surface, to which an image serves as a kind of film, or name it if you like a rind, because such image bears an appearance and form like to the thing whatever it is from whose body it is shed and wanders forth. This you may learn however dull of apprehension from what follows. First of all since among things open to sight many emit bodies, some in a state of loose diffusion, like smoke which logs of oak, heat which fires emit; some of a closer and denser texture, like the gossamer coats which at times cicades doff in summer, and the films which calves at their birth cast from the surface of their body, as well as the vesture which the slippery serpent puts off among the thorns; for often we see the brambles enriched with their flying spoils: since these cases occur, a thin image likewise must be emitted from things off their surface. For why those films should drop off and withdraw from things rather than films which are really thin, not one tittle of proof can be given; especially since there are on the surface of things many minute bodies which may be discharged in the same order they had before and preserve the outline of the shape, and be discharged with far more velocity, inasmuch as they are less liable to get hampered being few in number and stationed in the front rank. For without doubt we see many things discharge and freely give not only from the core and centre, as we said before, but from their surfaces, besides other things colour itself. And this is commonly done by yellow and red and dark-blue awnings, when they are spread over large theatres and flutter and wave as they stretch across their poles

and crossbeams; for then they dye the seated assemblage below and all the show of the stage and the richly attired company of the fathers, and compel them to dance about in their colour. And the more these objects are shut in all round by the walls of the theatre, the more do all of them within laugh on all hands, o'erlaid with graceful hues, the light of day being narrowed. Therefore since sheets of canvass emit colour from their surface, all things will naturally emit thin pictures too, since in each case alike they discharge from the surface. There are therefore as now shewn sure outlines of shapes, which fly all about possessed of an exquisitely small thickness and cannot when separate be seen one at a time. Again all smell smoke heat and other such-like things stream off things in a state of diffusion, because while they are coming from the depths of the body having arisen within it, they are torn in their winding passage, and there are no straight orifices to the paths, for them to make their way out by in a mass. But on the other hand when a thin film of surface colour is discharged, there is nothing to rend it, since it is ready to hand stationed in front rank. Lastly in the case of all idols which shew themselves to us in mirrors, in water or any other shining object, since their outsides are possessed of an appearance like to the things they represent, they must be formed of emitted images of things. There are therefore thin shapes and pictures like to the things, which, though no one can see them one at a time, yet when thrown off by constant and repeated reflexion give back a visible image from the surface of mirrors; and in no other way it would seem can they be kept so entire that shapes are given back so exceedingly like each object.

Now mark, and learn how thin the nature of an image is. And first of all, since the first-beginnings are so far below the ken of our senses and much smaller than the things which our eyes first begin to be unable to see, to strengthen yet more the proof of this also, learn in a few words how minutely fine are the beginnings of all things. First, living things are in some cases so very little, that their third part cannot be seen at all. Of what size are we to suppose any gut of such creatures to be? or the ball of the heart or the eyes? the limbs? or any part of the frame? how small they must be! And then further the several first-beginnings of which their soul and the nature of

their mind must be formed? do you not perceive how fine, how minute they are? Again in the case of all things which exhale from their body a pungent smell, all-heal, nauseous wormwood, strong-scented southernwood and the bitter centauries, any one of which, if you happen to [feel it] lightly between two [fingers, will impregnate them with a strong smell] * * but rather you are to know that idols of things wander about many in number in many ways, of no force, powerless to excite sense.

But lest haply you suppose that only those idols of things which go off from things and no others wander about, there are likewise those which are spontaneously begotten and are formed by themselves in this lower heaven which is called air: these fashioned in many ways are borne along on high and being in a fluid state cease not to alter their appearance and change it into the outline of shapes of every possible kind; as we see clouds sometimes gather into masses on high and blot the calm clear face of heaven, fanning the air with their motion. Thus often the faces of giants are seen to fly along and draw after them a far-spreading shadow; sometimes great mountains and rocks torn from the mountains are seen to go in advance and pass across the sun; and then some huge beast is observed to draw with it and bring on the other storm-clouds.

Now [I will proceed to shew] with what ease and celerity they are begotten and how incessantly they flow and fall away from things. The outermost surface is ever streaming off from things and admits of being discharged: when this reaches some things, it passes through them, glass especially. But when it reaches rough stones or the matter of wood, it is then so torn that it cannot give back any idol. But when objects at once shining and dense have been put in its way, a mirror especially, none of these results has place: it can neither pass through it, like glass, nor can it be torn either; such perfect safety the polished surface minds to ensure. In consequence of this idols stream back to us from such objects; and however suddenly at any moment you place any thing opposite a mirror, an image shews itself: hence you may be sure that thin textures and thin shapes of things incessantly stream from their surface. Therefore many idols are begotten in a short time, so that the birth of such things is with good reason named a rapid one. And as the sun must send forth

many rays of light in a short time in order that all things may be continually filled with it, so also for a like reason there must be carried away from things in a moment of time idols of things many in number in many ways in all directions round; since to whatever part of them we present a mirror before their surfaces, other things correspond to these in the mirror of a like shape and like colour. Moreover though the state of heaven has just before been of unsullied purity, with exceeding suddenness it becomes so hideously overcast, that you might imagine all its darkness had abandoned Acheron throughout and filled up the great vaults of heaven: in such numbers do faces of black horror rise up from amid the frightful night of stormclouds and hang over us on high. Now there is no one who can tell how small a fraction of these an image is, or express that sum in language.

Now mark: how swift the motion is with which idols are borne along, and what velocity is assigned to them as they glide through the air, so that but a short hour is spent on a journey through long space, whatever the spot towards which they go with a movement of varied tendency, all this I will tell in sweetly worded rather than in many verses; as the short song of the swan is better than the loud noise of cranes scattered abroad amid the ethereal clouds of the south. First of all we may very often observe that things which are light and made of minute bodies are swift. Of this kind are the light of the sun and its heat, because they are made of minute first things which are knocked forward so to speak and do not hesitate to pass through the space of air between, ever driven on by a blow following behind; for light on the instant is supplied by fresh light and brightness goaded to shew its brightness in what you might call an ever on-moving team. Therefore in like manner idols must be able to scour in a moment of time through space unspeakable, first because they are exceeding small and there is a cause at their back to carry and impel them far forward; where moreover they move on with such winged lightness; next because when emitted they are possessed of so rare a texture, that they can readily pass through any things and stream as it were through the space of air between. Again if those minute bodies of things which are given out from the inmost depths of these things, as the light and heat of the sun,

are seen in a moment of time to glide and spread themselves through the length and breadth of heaven, fly over sea and lands and flood the heaven, what then of those which stand ready posted in front rank, when they are discharged and nothing obstructs their egress? how much faster, you see, and farther must they travel, scouring through many times the same amount of space in the same time that the sunlight takes to spread over heaven! This too appears to be an eminently true proof of the velocity with which idols of things are borne along: as soon as ever the brightness of water is set down in the open air, if the heaven is starry, in a moment the clear radiant constellations of ether imaged in the water correspond to those in the heaven. Now do you see in what a moment of time an image drops down from the borders of heaven to the borders of earth? Therefore again and again I repeat you must admit that bodies capable of striking the eyes and of provoking vision [constantly travel] with a marvellous [velocity]. Smells too incessantly stream from certain things; as does cold from rivers, heat from the sun, spray from the waves of the sea, that eater into walls near the shore. Various sounds also cease not to fly through the air. Then too a moist salt flavour often comes into the mouth, when we are moving about beside the sea; and when we look on at the mixing of a decoction of wormwood, its bitterness affects us. In such a constant stream from all things the several qualities are carried and are transmitted in all directions round, and no delay, no respite in the flow is ever granted, since we constantly have feeling, and may at any time see, smell, and hear the sound of anything.

Again since a particular figure felt by the hands in the dark is known to be the same which is seen in the bright light of day, touch and sight must be excited by a quite similar cause. Well then if we handle a square thing and it excites our attention in the dark, in the day-light what square thing will be able to fall on our sight, except the image of that thing? Therefore the cause of seeing it is plain lies in images and no thing can be perceived without them. Well the idols of things I speak of are borne along all round and are discharged and transmitted in all directions; but because we can see with the eyes alone, the consequence is that, to whatever point

we turn our sight, there all the several things meet and strike it with their shape and colour. And the image gives the power to see and the means to distinguish how far each thing is distant from us; for as soon as ever it is discharged, it pushes before it and impels all the air which lies between it and the eyes; and thus that air all streams through our eyes and brushes so to say the pupils and so passes through. The consequence is that we see how far distant each thing is. And the greater the quantity of air which is driven on before it and the larger the current which brushes our eyes, the more distant each different thing is seen to be. You must know these processes go on with extreme rapidity, so that at one and the same moment we see what like a thing is and how far distant it is. And this must by no means be deemed strange herein that, while the idols which strike the eyes cannot be seen one at a time, the things themselves are seen. For thus when the wind too beats us with successive strokes and when piercing cold streams, we are not wont to feel each single particle of that wind and cold, but rather the whole result; and then we perceive blows take effect on our body just as if something or other were beating it and giving us a sensation of its body outside. Again when we thump a stone with a finger, we touch merely the outermost colour on the surface of the stone, and yet we do not feel that colour by our touch, but rather we feel the very hardness of the stone seated in its inmost depths.

Now mark, and learn why the image is seen beyond the mirror; for without doubt it is seen withdrawn far within. The case is just the same as with things which are viewed in their reality beyond a door, when it offers through it an unobstructed prospect and lets many things outside be seen from a house. That vision too is effected by two separate airs: first there is an air seen in such a case inside the doorway; next come the leaves of the door right and left; next a light outside brushes the eyes, then a second air, then those things outside which are viewed in their reality. Thus when the image of the mirror has first discharged itself, in coming to our sight it pushes forward and impels all the air which lies between it and the eyes, and enables us to see the whole of it before the mirror. But when we have perceived the mirror as well, at once the image which is

conveyed from us reaches the mirror and then is reflected and comes back to our eyes, and drives on and rolls in front of it a second air and lets us see this before itself, and for this reason it looks so far withdrawn from the mirror. Wherefore again and again I repeat there is no cause at all to wonder why the images give back the reflexion from the surface of mirrors in the spot they do, since in both the given cases the result is produced by two airs. To proceed, the right side of our body is seen in mirrors to be on the left, because when the image comes and strikes on the plane of the mirror, it is not turned back unaltered, but is beaten out in a right line backwards, just as if you were to take a plaster mask before it is dry and dash it on a pillar or beam, and it forthwith were to preserve the lines of its features undistorted in front and were to strike out an exact copy of itself straight backwards. The result will be that the eye which was right will now be left; and conversely the left become the right. An image may also be so transmitted from one mirror to another that five or six idols are often produced. And thus all the things which lurk in the inmost corners of a house, however far they are withdrawn into tortuous recesses, may yet be all brought out through winding passages by the aid of a number of mirrors and be seen to be in the house. So unfailingly does the image reflect itself from mirror to mirror; and when the left side is presented, it becomes the right in the new image; then it is changed back again and turns round to what it was. Moreover all little sides of mirrors which possess a curvature resembling our side, send back to us idols with their right corresponding to our right either for this reason, because the image is transmitted from one mirror to another, and then after it has been twice struck out flies to us, or else because the image, when it has come to the mirror, wheels about, because the curved shape of the mirror teaches it to turn round and face us. Again you would think that idols step out and put down their foot at the same time with us and mimic our action, because from before whatever part of a mirror you move away, from that part forthwith no idols can be reflected; since nature constrains all things, when they are carried back and recoil from things, to be given back at angles equal to those at which they impinged.

Bright things again the eyes eschew and shun to look upon:

the sun even blinds them, if you persist in turning them towards it, because its power is great and idols are borne through the clear air with great downward force from on high, and strike the eyes and disorder their fastenings. Moreover any vivid brightness often burns the eyes, because it contains many seeds of fire which make a way in and beget pain in the eyes. Again whatever the jaundiced look at, becomes a greenish-yellow, because many seeds of greenish-yellow stream from their body and meet the idols of things, and many too are mixed up in their eyes, and these by their infection tinge all things with sallow hues. Again we see out of the dark things which are in the light for this reason: when the black air of darkness being the nearer has first entered and taken possession of the open eyes, the bright white air follows straightway after and cleanses them so to say and dispels the black shadows of the other air; for this is a great deal more nimble, a great deal more subtle and more efficacious. As soon as it has filled with light and opened up the passages of the eyes which the black air had before blocked up, forthwith the idols of things which are situated in the light follow and excite them so that we see. This we cannot do conversely in the dark out of the light, because the grosser air of darkness follows behind and quite fills all the openings and blocks up the passages of the eyes, not letting the idols of any things at all be thrown into the eyes to move them. Again when we descry far off the square towers of a town, they often appear to be round for this reason: all the angles are seen from a distance to look obtuse, or rather are not seen at all, and their blow is lost and their stroke never makes its way to our sight, because while the idols are borne on through much air, the air by repeated collisions blunts the stroke perforce. When in this way all the angles have together eluded the sense, the stone structures are rounded off as if by the lathe; yet they do not look like the things which are close before us and really round, but somewhat resembling them as in shadowy outline. Our shadow likewise seems to move in the sunshine and to follow our steps and mimic our action; if you think forsooth that air deprived of life can step, imitating the motions and the actions of men; for that which we are wont to term shadow can be nothing but air devoid of light. Sure enough because the earth in certain spots successively is deprived of light wherever we intercept it in moving about, while that part of it which we have quitted is filled with light, therefore that which was the shadow of our body, seems to have always followed us unchanged in a direct line with us. For new rays of light ever pour in and the old are lost, just as if wool were drawn into the fire. Therefore the earth is readily stripped of light, and again filled, and cleanses itself from black shadows.

And yet in all this we do not admit that the eyes are cheated one whit. For it is their province to observe in what spot soever light and shade are; but whether the lights are still the same or not, and whether it is the same shadow which was in this spot that is now passing to that, or whether what we said a little before is not rather the fact, this the reason of the mind, and only it, has to determine; nor can the eyes know the nature of things. Do not then fasten upon the eyes this frailty of the mind. The ship in which we are sailing, moves on while seeming to stand still; that one which remains at its moorings, is believed to be passing by. The hills and fields seem to be dropping astern, past which we are driving our ship and flying under sail. The stars all seem to be at rest fast fixed to the ethereal vaults, and yet are all in constant motion, since they rise and then go back to their far-off places of setting, after they have traversed the length of heaven with their bright bodies. In like manner sun and moon seem to stay in one place, bodies which simple fact proves are carried on. And though between mountains rising up afar off from amid the waters there opens out for fleets a free passage of wide extent, yet a single island seems to be formed out of them united into one. When children have stopped turning round themselves, the halls appear to them to whirl about and the pillars to course round to such a degree, that they can scarce believe that the whole roof is not threatening to tumble down upon them. Again when nature begins to raise on high the sun's beam ruddy with bickering fires and to lift it up above the mountains, those hills above which the sun then seems to you to be, as blazing close at hand he dyes them with his own fire, are distant from us scarce two thousand arrow-flights, yea often scarce five hundred casts of a javelin; and yet between them and the sun lie immense levels of sea, spread out below the huge borders of ether, and many thousands of lands are between, held

by divers peoples and races of wild beasts. Then a puddle of water not more than a finger-breadth deep, which stands between the stones in the streets, offers a prospect beneath the earth of a reach as vast, as that with which the high yawning maw of heaven opens out above the earth; so that you seem to discern clouds and see the bodies of birds far withdrawn into that wondrous sky beneath the earth. Again when our stout horse has stuck in the middle of a river and we have looked down on the swift waters of the stream, some force seems to carry athwart the current the body of the horse which is standing still and to force it rapidly up the stream; and to whatever point we cast our eyes about, all things seem to be carried on and to be flowing in the same way as we are. Again although a portico runs in parallel lines from one end to the other and stands supported by equal columns along its whole extent, yet when from the top of it it is seen in its entire length, it gradually forms the contracted top of a narrowing cone, until uniting roof with floor and all the right side with the left it has brought them together into the vanishing point of a cone. To sailors on the sea the sun appears to rise out of the waters and in the waters to set and bury his light; just because they behold nothing but water and sky; that you may not lightly suppose the credit of the senses to be shaken on all hands. Then to people unacquainted with the sea ships in harbour seem to be all askew and with poop-fittings broken to be pressing up against the water. For whatever part of the oars is raised above the salt water, is straight, and the rudders in their upper half are straight: the parts which are sunk below the water-level, appear to be broken and bent round and to slope up and turn back towards the surface and to be so much twisted back as wellnigh to float on the top of the water. And when the winds carry the thinly scattered clouds across heaven in the night-time, then do the glittering signs appear to glide athwart the rack and to be travelling on high in a direction quite different to their real course. Then if our hand chance to be placed beneath one eye and press it below, through a certain sensation all things which we look at appear then to become double as we look; the light of lamps brilliant with flames to be double, double too the furniture through the whole house, double men's faces and men's bodies. Again when sleep has chained down our limbs in sweet slumber and the whole

body is sunk in profound repose, yet then we seem to ourselves to be awake and to be moving our limbs, and mid the thick darkness of night we think we see the sun and the daylight; and though in a confined room, we seem to be passing to new climates seas rivers and mountains and to be crossing plains on foot and to hear noises, though the austere silence of night prevails all round, and to be uttering speech though quite silent. Many are the other marvels of this sort we see, which all seek to shake as it were the credit of the senses: quite in vain, since the greatest part of these cases cheats us on account of the mental suppositions which we add of ourselves, taking those things as seen which have not been seen by the senses. For nothing is harder than to separate manifest facts from doubtful which straightway the mind adds on of itself.

Again if a man believe that nothing is known, he knows not whether this even can be known, since he admits he knows nothing. I will therefore decline to argue the case against him who places himself with head where his feet should be. And yet granting that he knows this, I would still put this question, since he has never yet seen any truth in things, whence he knows what knowing and not knowing severally are, and what it is that has produced the knowledge of the true and the false and what has proved the doubtful to differ from the certain. You will find that from the senses first has proceeded the knowledge of the true and that the senses cannot be refuted. For that which is of itself to be able to refute things false by true things must from the nature of the case be proved to have the higher certainty. Well then what must fairly be accounted of higher certainty than sense? Shall reason founded on false sense be able to contradict them, wholly founded as it is on the senses? and if they are not true, then all reason as well is rendered false. Or shall the ears be able to take the eyes to task, or the touch the ears? Again shall the taste call in question this touch, or the nostrils refute or the eyes controvert it? Not so, I guess; for each apart has its own distinct office, each its own power; and therefore we must perceive what is soft and cold or hot by one distinct faculty, by another perceive the different colours of things and thus see all objects which are conjoined with colour. Taste too has its faculty apart; smells spring from one source, sounds

from another. It must follow therefore that any one sense cannot confute any other. No nor can any sense take itself to task, since equal credit must be assigned to it at all times. What therefore has at any time appeared true to each sense, is true. And if reason shall be unable to explain away the cause why things which close at hand were square, at a distance looked round, it yet is better, if you are at a loss for the reason, to state erroneously the causes of each shape, than to let slip from your grasp on any side things manifest and ruin the groundwork of belief and wrench up all the foundations on which rest life and existence. For not only would all reason give way, life itself would at once fall to the ground, unless you choose to trust the senses and shun precipices and all things else of this sort that are to be avoided, and to pursue the opposite things. All that host of words then be sure is quite unmeaning, which has been drawn out in array against the senses. Once more, as in a building, if the rule first applied is wry, and the square is untrue and swerves from its straight lines, and if there is the slightest hitch in any part of the level, all the construction must be faulty, all must be wry crooked sloping, leaning forwards, leaning backwards, without symmetry, so that some parts seem ready to fall, others do fall, ruined all by the first erroneous measurements; so too all reason of things must needs prove to you distorted and false, which is founded on false senses.

And now to explain in what way the other senses do each perceive their several objects, is the nowise arduous task which is still left.

In the first place all sound and voice is heard when they have made their way into the ears and have struck with their body the sense of hearing. For voice too and sound you must admit to be bodily, since they are able to act upon the senses. Again voice often abrades the throat, and shouting in passing forth makes the windpipe more rough: when to wit the first-beginnings of voices have risen up in larger mass and commenced to pass abroad through their strait passage, you are to know the door of the mouth now crammed itself is abraded. There is no doubt then that voices and words consist of bodily first-beginnings, with the power to hurt; nor can you fail to know how much of body is taken away and how much is withdrawn from men's very sinews

and strength by a speech continued without interruption from the dawning brightness of morning to the shadow of black night, above all if it has been poured forth with much loud shouting. Voice therefore must be bodily, since a man by much speaking loses a portion from his body. Next roughness of voice comes from roughness of first-beginnings, as smoothness is produced from smoothness. Nor are the first-beginnings of like shape which pierce the ears in these two cases: when the trumpet brays dully in deep low tones, the barbarian country roused echoing back the hoarse hollow sound, and when swans from the headstrong torrents of Helicon raise their clear-toned dirge with plaintive voice.

When therefore we force these voices forth from the depths of our body and discharge them straight out at the mouth, the pliant tongue deft fashioner of words gives them articulate utterance and the structure of the lips does its part in shaping them. Therefore when the distance is not long between the point from which each several voice has started and that at which it arrives, the very words too must be plainly heard and distinguished syllable by syllable; for each voice retains its structure and retains its shape. But if the space between be more than is suitable, the words must be huddled together in passing through much air and the voice be disorganised in its flight through the same. Therefore it is that you can hear a sound, yet cannot distinguish what the meaning of the words is: so huddled and hampered is the voice when it comes. Again a single word often stirs the ears of a whole assembly of people, when uttered by the crier's mouth. One voice therefore in a moment starts asunder into many voices, since it distributes itself separately into all the ears, stamping upon them the form and distinct sound of the word. But such of the voices as do not fall directly on the ears, are carried past and lost, fruitlessly dispersed in air: some striking upon solid spots are thrown back and give back a sound and sometimes mock by an echo of the word. When you fully perceive all this, you may explain to yourself and others how it is that in lonely spots rocks give back in regular succession forms of words like to those sent forth, as we seek our comrades straying about among the darkened hills and with loud voice call upon them scattered abroad. I have seen places give back as many as six or seven

voices, when you sent forth one: in such wise did the very hills dash back on hills and repeat the words thus trained to come back. These spots the people round fancy that the goat-footed satyrs and nymphs inhabit, and tell that they are the fauns by whose night-pervading noise and sportive play as they declare the still silence is broken and sounds produced of stringed instruments and sweet plaintive melodies, such as the pipe pours forth when beaten by the fingers of the players; the country-people hearing far and wide, what time Pan nodding the piny covering of his head half a beast's oft runs over the gaping reeds with curved lip, making the pipe without ceasing to pour forth its woodland song. Other such like prodigies and marvels they tell of, that they may not haply be thought to inhabit lonely places, abandoned even by the gods. On this account they vaunt such wonders in their stories or are led on by some other reason; inasmuch as the whole race of man is all too greedy after listening ears.

To proceed, you need not wonder how it is that through places, through which the eyes cannot see plain things, voices come and strike the ears. We often see a conversation go on even through closed doors, sure enough because the voice can pass uninjured through the winding openings of things, while idols refuse to pass: they are torn to shreds, if the openings through which they glide are not straight, like those of glass, through which every image passes. Again a voice distributes itself in all directions, since voices are begotten one out of another, when a single voice has once gone forth and sprung into many, as a spark of fire is often wont to distribute itself into its constituent fires. Therefore places are filled with voices, which though far withdrawn out of view yet are all in commotion and stirred by sound. But idols all proceed in straight courses as soon as they have been discharged; and therefore you can never see beyond a wall, but you may hear voices outside it. And yet this very voice even in passing through the walls of houses is blunted and enters the ears in a huddled state, and we seem to hear the sound rather than the actual words.

The tongue and palate whereby we perceive flavour, have not in them anything that calls for longer explanation or offers more difficulty. In the first place we perceive flavour in the mouth when we press it out in chewing our food, in the same way as when one haply begins to squeeze with his hand and dry a sponge full of water. Next the whole of what we press out distributes itself through the cavities of the palate and the intricate openings of the porous tongue. Therefore when the bodies of oozing flavour are smooth, they pleasantly touch and pleasantly feel all the parts about the moist exuding quarters of the palate. But on the other hand when they rise in a mass they puncture and tear the sense according to the degree in which they are pervaded by roughness. Next the pleasure from the flavour reaches as far as the palate; when however it has passed down through the throat, there is no pleasure while it is all distributing itself into the frame. And it makes no matter what the food is with which the body is nurtured, provided you can digest what you take and transmit it into the frame and keep the stomach in an equable condition of moistness.

I will now explain how it is that different food is pleasant and nutritious for different creatures; also why that which to some is nauseous and bitter, may yet to others seem passing sweet; and why in these matters the difference and discrepancy is so great that what to one man is food, to another is rank poison; and there is actually a serpent which on being touched by a man's spittle wastes away and destroys itself by gnawing its body. Again hellebore for us is rank poison, but helps to fatten goats and quails. That you may know how this comes to pass, first of all you must remember what we have said before, that the seeds which are contained in things are mixed up in manifold ways. Again all living creatures soever which take food, even as they are unlike on the outside, and, differing in each after its kind, an exterior contour of limbs bounds them, so likewise are they formed of seeds of varying shape. Again since the seeds differ, there must be a discrepancy in the spaces between and the passages, which we name openings, in all the limbs and mouth and palate as well. Some openings therefore must be smaller, some larger; some things must have them three-cornered, others square; many must be round, some many-angled after many fashions. For as the relation between the shapes of seeds and their motions require, the openings also must differ accordingly in their shapes; and the passages must vary, as varies the texture formed by the

seeds which bound them. For this reason when that which is sweet to some becomes bitter to others, for that creature to whom it is sweet the smoothest bodies must enter the cavities of the palate with power to feel them all over; but on the other hand in the case of those to whom the same thing is bitter within, rough and barbed seeds sure enough pass down the throat. It is easy now from these principles to understand all particular cases: thus when a fever has attacked any one from too great a flow of bile, or a violent disease has been excited in any other way, thereupon the whole body is disordered and all the arrangements of particles then and there changed; the consequence of which is that the bodies which before were suited to excite sensation, suit no more; and those fit it better, which are able to make their way in and beget a bitter sense. Both kinds for instance are mixed up in the flavour of honey: a point we have often proved before.

Now mark me, and I will discuss the way in which the contact of smell affects the nostrils: and first there must be many things from which a varied flow of smells streams and rolls on; and we must suppose that they thus stream and discharge and disperse themselves among all things alike; but one smell fits itself better to one creature, another to another on account of their unlike shapes; and therefore bees are drawn on by the smell of honey through the air to a very great distance, and so are vultures by carcases. Also the onward-reaching power of scent in dogs leads them whithersoever the cloven hoof of wild beasts has carried them in their course; and the smell of man is felt far away by the saviour of the Romans' citadel, the bright white goose. Thus different scents assigned to different creatures led each to its appropriate food and constrain them to recoil from nauseous poison, and in this way the races of beasts are preserved.

Of all these different smells then which strike the nostrils one may reach to a much greater distance than another; though none of them is carried so far as sound, as voice, to say nothing of things which strike the eyesight and provoke vision. For in its mazy course each comes slowly on and is sooner lost, being gradually dispersed into the readily receiving expanse of air; first because coming out of its depths it with difficulty discharges itself from the thing: for the fact that all things are found to

have a stronger smell when crushed, when pounded, when broken up by fire, shews that odours stream and withdraw from the inner parts of things: next you may see that smell is formed of larger first-beginnings than voice, since it does not pass through stone walls, through which voice and sound are borne without fail. For this reason also you will find that it is not so easy to trace out in what quarter a thing which smells is situated; for the blow cools down as it loiters through the air, and the courier particles of things are no longer hot when they finish their race to sense; for which reason dogs are often at fault and lose the scent.

But what I have said is not found in smells and in the class of flavours only, but also the forms and colours of things are not all so well suited to the senses of all, but that some will be more distressing to the sight than others. Moreover ravenous lions cannot face and bear to gaze upon a cock with flapping wings putting night to rout and wont to summon morning with shrill voice: in such wise they at once bethink themselves of flight, because sure enough in the body of cocks are certain seeds, and these, when they have been discharged into the eyes of lions, bore into the pupils and cause such sharp pain that courageous though they be, they cannot continue to face them; while at the same time these things cannot hurt at all our sight, either because they do not enter in or because the moment they enter a free passage out of the eyes is granted them, so that they cannot by staying behind hurt the eyes in any part.

Now mark, and hear what things move the mind, and learn in a few words whence the things which come into it do come. I say first of all that idols of things wander about many in number in many ways in all directions round, extremely thin; and these when they meet, readily unite, like a cobweb or piece of gold-leaf. For these idols are far thinner in texture than those which take possession of the eyes and provoke vision; since these enter in through the porous parts of the body and stir the fine nature of the mind within and provoke sensation. Therefore we see Centaurs and limbs of Scyllas and Cerberus-like faces of dogs and idols of those who are dead, whose bones earth holds in its embrace; since idols of every kind are everywhere borne about, partly those which are spontaneously produced within the air, partly all those which withdraw from various things and those

which are formed by compounding the shapes of these. For assuredly no image of Centaur is formed out of a live one, since no such nature of living creature ever existed; but when images of a horse and a man have by chance come together, they readily adhere at once, as we said before, on account of their fine nature and thin texture. All other things of the kind are produced in like fashion. And when these from extreme lightness are borne on with velocity, as I shewed before, any one subtle composite image you like readily moves the mind by a single stroke; for the mind is fine and is itself wondrously nimble.

That all this is done as I relate you may easily learn from what follows. So far as the one is like the other, seeing with the mind and seeing with the eyes must be produced in a like way. Well then since I have shewn that I perceive for instance a lion by means of idols which provoke the eyes, you may be sure that the mind is moved in a like way, which by means of idols sees a lion or anything else just as well as the eyes, with this difference that it perceives much thinner idols. And when sleep has prostrated the body, for no other reason does the mind's intelligence wake, except because the very same idols provoke our minds which provoke them when we are awake, and to such a degree that we seem without a doubt to perceive him whom life has left and death and earth gotten hold of. This nature constrains to come to pass because all the senses of the body are then hampered and at rest throughout the limbs and cannot refute the unreal by real things. Moreover memory is prostrate and relaxed in sleep and protests not that he has long been in the grasp of death and destruction whom the mind believes it sees alive. Furthermore it is not strange that idols move and throw about their arms and other limbs in regular measure: for sometimes in sleep an image is seen to do this: when the first to wit has gone and a second then been born in another posture, that former one seems to have altered its attitude. This remember you must assume to take place with exceeding celerity: so great is the velocity, so great the store of things; so great in any one unit of time that sense can seize is the store of particles, out of which the supply may go on.

And here many questions present themselves and many points must be cleared up by us, if we desire to give a plain exposition

of things. The first question is why, when the wish has occurred to any one to think of a thing, his mind on the instant thinks of that very thing. Do idols observe our will, and so soon as we will does an image present itself to us, if sea, if earth, ay or heaven is what we wish? Assemblies of men, a procession, feasts, battles, everything in short does nature at command produce and provide? and though to increase the marvel the mind of others in the same spot and room is thinking of things all quite different. What again are we to say, when we see in sleep idols advance in measured tread and move their pliant limbs, when in nimble wise they put out each pliant arm in turn and represent to the eyes over and over again an action with foot that moves in time? Idols to wit are imbued with art and move about well-trained, to be able in the night-time to exhibit such plays. Or will this rather be the truth? because in one unit of time, when we can perceive it by sense and while one single word is uttered, many latent times are contained which reason finds to exist, therefore in any time you please all the several idols are at hand ready prepared in each several place. And because they are so thin, the mind can see distinctly only those which it strains itself to see; therefore all that there are besides are lost, save only those for which it has made itself ready. Moreover it makes itself ready and hopes to see that which follows upon each thing; therefore the result does follow. Do you not see that the eyes also, when they essay to discern things which are thin and fine, strain themselves and make themselves ready, and without that we cannot see distinctly? And yet you may observe even in things which are plain before us, that if you do not attend, it is just as if the thing were all the time away and far distant. What wonder then, if the mind loses all other things save those with which it is itself earnestly occupied? Then too from small indications we draw the widest inferences and by our own fault entangle ourselves in the meshes of self-delusion.

Sometimes it happens too that an image of the same kind is not supplied, but what before was a woman, turns out in our hands to have changed into a man; or a different face and age succeed to the first. But sleep and forgetfulness prevent us from feeling surprise at this.

And herein you should desire with all your might to shun

the weakness, with a lively apprehension to avoid the mistake of supposing that the bright lights of the eyes were made in order that we might see; and that the tapering ends of the shanks and hams are attached to the feet as a base in order to enable us to step out with long strides; or again that the forearms were slung to the stout upper arms and ministering hands given us on each side, that we might be able to discharge the needful duties of life. Other explanations of like sort which men give, one and all put effect for cause through wrongheaded reasoning; since nothing was born in the body that we might use it, but that which is born begets for itself a use: thus seeing did not exist before the eyes were born, nor the employment of speech ere the tongue was made; but rather the birth of the tongue was long anterior to language and the ears were made long before sound was heard, and all the limbs, I trow, existed before there was any employment for them: they could not therefore have grown for the purpose of being used. But on the other hand engaging in the strife of battle and mangling the body and staining the limbs with gore were in vogue long before glittering darts ever flew; and nature prompted to shun a wound or ever the left arm by the help of art held up before the person the defence of a shield. Yes and consigning the tired body to rest is much older than a soft-cushioned bed, and the slaking of thirst had birth before cups. These things therefore which have been invented in accordance with the uses and wants of life, may well be believed to have been discovered for the purpose of being used. Far otherwise is it with all those things which first were born, then afterwards made known the purposes to which they might be put; at the head of which class we see the senses and the limbs. Wherefore again and again I repeat, it is quite impossible to believe that they could have been made for the duties which they discharge.

It ought likewise to cause no wonder that the nature of the body of each living creature absolutely requires food. I have shewn that bodies ebb away and withdraw from things, many in number in many ways; but most numerous must be those which withdraw from living things; for because these are tried by active motion, and many particles are pressed out from the depths of the frame and carried off by sweating, many breathed out through the mouth, when they pant from exhaustion, from such causes

the body becomes rarefied and the whole nature undermined; and this state is attended by pain. Food therefore is taken in order to give support to the frame and recruit the strength by its infusion, and to close up the open-mouthed craving for meat throughout limbs and veins. The moisture too passes into all the parts which call for moisture; and many accumulated bodies of heat which cause a burning in our stomach, the approach of liquid scatters and quenches as if they were fire, so that dry heat can no longer parch the frame. In this way then you see gasping thirst is drenched out of our body, in this way the hungry craving is satisfied.

Now how it comes to pass that we are able to step out when we please, and how it is given us to move about our limbs, and what cause is wont to push forward the great load of this our body I will tell: do you take in my words. I say that idols of walking first present themselves to our mind and strike on the mind, as we said before: then the will arises; for no one begins to do anything, until his mind has first determined what it wills. From the very fact that it determines such thing, there is an image of that thing. When therefore the mind bestirs itself in such a way as to will to walk and step out, it strikes at the same moment the force of the soul which is spread over the whole body throughout the limbs and frame; and this is easily done, since the whole is held in close union with the mind. Next the soul in its turn strikes the body, and thus the whole mass by degrees is pushed on and set in motion. Then again the body becomes also rarefied, and the air, as you see its nature is, being always so nimble in moving, comes and passes in great quantity through the opened pores and is thus distributed into the most minute parts of the body. In this way then by these two causes acting in two ways the body like a ship is carried on by sails and wind. And herein it need not excite any surprise that such very minute bodies can steer so great a body and turn about the whole of this our load; for wind though fine with subtle body drives and pushes on a large ship of large moving mass and one hand directs it however great the speed at which it is going and one rudder steers it to any point you like; and by means of blocks of pulleys and tread-wheels a machine stirs many things of great weight and raises them up with slight effort.

Now by what means yon sleep lets a stream of repose over the limbs and dispels from the breast the cares of the mind, I will tell in sweetly worded rather than in many verses; as the short song of the swan is better than the loud noise of cranes scattered abroad amid the ethereal clouds of the south. Do you lend me a nice ear and a keen mind, that you may not deny what I say to be possible and secede with breast disdainfully rejecting the words of truth, you yourself being in fault the while and unable to discern. Sleep mainly takes place when the force of the soul has been scattered about through the frame, and in part has been forced abroad and taken its departure, and in part has been thrust back and has withdrawn into the depths of the body: after that the limbs are relaxed and droop. For there is no doubt that this sense exists in us by the agency of the soul; and when sleep obstructs the action of this sense, then we must assume that our soul has been disordered and forced abroad; not indeed all; for then the body would lie steeped in the everlasting chill of death. Where no part of the soul remained behind concealed in the limbs, as fire remains concealed when buried under much ash, whence could sense be suddenly rekindled through the limbs, as flame can spring up from hidden fire?

But by what means this change of condition is accomplished and from what the soul can be disordered and the body grow faint, I will explain: do you mind that I waste not my words on the wind. In the first place the body in its outer side, since it is next to and is touched by the air, must be thumped and beaten by its repeated blows; and for this reason all things as a rule are covered either by a hide or else by shells or by a callous skin or by bark. When creatures breathe, this air at the same time buffets the inner side also, as it is inhaled and exhaled. Therefore since the body is beaten on both sides alike and blows arrive by means of the small apertures at the primal parts and primal elements of our body, there gradually ensues a sort of breaking up throughout our limbs, the arrangements of the first-beginnings of body and mind getting disordered. Then next a part of the soul is forced out and a part withdraws into the inner recesses; a part too scattered about through the frame cannot get united together and so act and be acted upon by motion; for nature intercepts all communication and blocks up all the passages; and therefore sense retires deep into the frame as the motions are all altered. And since there is nothing as it were to lend support to the frame, the body becomes weak and all the limbs are faint, the arms and eyelids droop and the hams even in bed often give way under you and relax their powers. Then sleep follows on food, because food produces just the same effects as air, while it is distributed into all the veins; and that sleep is much the heaviest which you take when full or tired, because then the greatest number of bodies fall into disorder, bruised by much exertion. On the same principle the soul comes in part to be forced more deeply into the frame, and there is also a more copious emission of it abroad, and at the same time it is more divided and scattered in itself within you.

And generally to whatever pursuit a man is closely tied down and strongly attached, on whatever subject we have previously much dwelt, the mind having been put to a more than usual strain in it, during sleep we for the most part fancy that we are engaged in the same; lawyers think they plead causes and draw up covenants of sale, generals that they fight and engage in battle, sailors that they wage and carry on war with the winds, we think we pursue our task and investigate the nature of things constantly and consign it when discovered to writings in our native tongue. So all other pursuits and arts are seen for the most part during sleep to occupy and mock the minds of men. And whenever men have given during many days in succession undivided attention to games, we generally see that after they have ceased to perceive these with their senses, there yet remain passages open in the mind through which the same idols of things may enter. Thus for many days those same objects present themselves to the eyes, so that even when awake they see dancers as they think moving their pliant limbs, and receive into the ears the clear music of the harp and speaking strings, and behold the same spectators and at the same time the varied decorations of the stage in all their brilliancy. So great is the influence of zeal and inclination, so great is the influence of the things in which men have been habitually engaged, and not men only but all living creatures. Thus you will see stout horses, even when their bodies are lying down, yet in their sleep sweat and pant without ceasing and strain their powers to the utmost as if for the prize,

or as if the barriers were thrown open * . And often during soft repose the dogs of hunters do yet all at once throw about their legs and suddenly utter cries and repeatedly snuff the air with their nostrils, as though they had found and were on the tracks of wild beasts; and after they are awake often chase the shadowy idols of stags, as though they saw them in full flight, until they have shaken off their delusions and come to themselves again. And the fawning brood of dogs brought up tame in the house haste to shake their body and raise it up from the ground, as if they beheld unknown faces and features. And the fiercer the different breeds are, the greater rage they must display in sleep. But the various kinds of birds flee and suddenly in the night time trouble with their wings the groves of the gods, when in gentle sleep hawks and pursuing birds have appeared to shew fight and offer battle. Again the minds of men which pursue great aims under great emotions, often during sleep pursue and carry on the same in like manner; kings take by storm, are taken, join battle, raise a loud cry as if stabbed on the spot. Many struggle hard and utter groans in pain, and as if gnawed by the bite of panther or cruel lion fill all the place with loud cries. Many during sleep speak of important affairs and have often and often disclosed their own guilt. Many meet death; many as if tumbling down from high precipices to the ground with their whole body, are scared with terror and after sleep as if out of their judgment scarce come to themselves again, quite disordered by their body's turmoil. Again a thirsty man sits down beside a river or a pleasant spring and gulps down well-nigh all the stream. Cleanly people often, when sound asleep, believing that they are lifting their dress beside a urinal or the public vessels, pour forth the filtered liquid of their whole body, and the Babylonian coverlets of surpassing brilliancy are drenched. Then too those, into the boiling currents of whose age seed is for the first time passing, when the ripe fulness of days has produced it in their limbs, idols encounter from without from what body soever, harbingers of a glorious face and a beautiful bloom, which stir and excite the frame.

That seed we have spoken of before is stirred up in us, as soon as ripe age fortifies the frame. For as different causes set in motion and excite different things, so from man the sole influence

of man draws forth human seed. As soon then as it has been forced out from and quits its proper seats throughout the limbs and frame, it withdraws itself from the whole body and meets together in appropriate places and rouses forthwith the appropriate parts of the body. The places are excited and swell with seed, and the inclination arises to emit the seed towards that to which the fell desire all tends, and the body seeks that object from which the mind is wounded by love; for all as a rule fall towards their wound and the blood spirts out in that direction whence comes the stroke by which we are struck; and if he is at close quarters, the red stream covers the foe. Thus then he who gets a hurt from the weapons of Venus, whatever be the object that hits him, inclines to the quarter whence he is wounded, and yearns to unite with it and join body with body; for a mute desire gives a presage of the pleasure.

This pleasure is for us Venus; from that desire is the Latin name of love, from that desire has first trickled into the heart yon drop of Venus' honeyed joy, succeeded soon by chilly care; for though that which you love is away, yet idols of it are at hand and its sweet name is present to the ears. But it is meet to fly idols and scare away all that feeds love and turn your mind on another object, distract your passion elsewhere and not keep it, with your thoughts once set on one object by love of it, and so lay up for yourself care and unfailing pain. For the sore gathers strength and becomes inveterate by feeding, and every day the madness grows in violence and the misery becomes aggravated, unless you erase the first wounds by new blows and first heal them when yet fresh, roaming abroad after Venus the pandemian, or transfer to something else the emotions of your mind.

Nor is he who shuns love without the fruits of Venus, but rather enjoys those blessings which are without any pain: doubtless the pleasure from such things is more unalloyed for the healthy-minded than for the love-sick; for in the very moment of enjoying the burning desire of lovers wavers and wanders undecided, and they cannot tell what first to enjoy with eyes and hands. What they have sought, they tightly squeeze and cause pain of body and often imprint their teeth on the lips and clash mouth to mouth in kissing, because the pleasure is not pure and there are

hidden stings which stimulate to hurt even that whatever it is from which spring those germs of frenzy. But Venus with light hand breaks the force of these pains during love, and the fond pleasure mingled therein reins in the bites. For in this there is hope, that from the same body whence springs their burning desire, their flame may likewise be quenched; though nature protests that the very opposite is the truth; and this is the one thing of all, in which, when we have most of it, then all the more the breast burns with fell desire. Meat and drink are taken into the body; and as they can fill up certain fixed parts, in this way the craving for drink and bread is easily satisfied; but from the face and beautiful bloom of man nothing is given into the body to enjoy save flimsy idols; a sorry hope which is often snatched off by the wind. As when in sleep a thirsty man seeks to drink and water is not given to quench the burning in his frame, but he seeks the idols of waters and toils in vain and thirsts as he drinks in the midst of the torrent stream, thus in love Venus mocks lovers with idols, nor can bodies satisfy them by all their gazing upon them nor can they with their hands rub aught off the soft limbs, wandering undecided over the whole body. At last when they have united and enjoy the flower of age, when the body now has a presage of delights and Venus is in the mood to sow the fields of woman, they greedily clasp each other's body and suck each other's lips and breathe in, pressing meanwhile teeth on each other's mouth; all in vain, since they can rub nothing off nor enter and pass each with his whole body into the other's body; for so sometimes they seem to will and strive to do: so greedily are they held in the chains of Venus, while their limbs melt overpowered by the might of the pleasure. At length when the gathered desire has gone forth, there ensues for a brief while a short pause in the burning passion; and then returns the same frenzy, then comes back the old madness, when they are at a loss to know what they really desire to get, and cannot find what device is to conquer that mischief; in such utter uncertainty they pine away by a hidden wound.

Then too they waste their strength and ruin themselves by the labour, then too their life is passed at the beck of another. Meanwhile their estate runs away and is turned into Babylonian

coverlets; duties are neglected and their good name staggers and sickens. On her feet laugh elastic and beautiful Sicyonian shoes, yes, and large emeralds with green light are set in gold and the sea-coloured dress is worn constantly and much used drinks in the sweat. The noble earnings of their fathers are turned into hair-bands, head-dresses; sometimes are changed into a sweeping robe and Alidensian and Cean dresses. Feasts set out with rich coverlets and viands, games, numerous cups, perfumes crowns and garlands are prepared; all in vain, since out of the very well-spring of delights rises up something of bitter, to pain amid the very flowers; either when the conscience-stricken mind haply gnaws itself with remorse to think that it is passing a life of sloth and ruining itself in brothels, or because she has launched forth some word and left its meaning in doubt and it cleaves to the love-sick heart and burns like living fire, or because it fancies she casts her eyes too freely about or looks on another, and it sees in her face traces of a smile.

And these evils are found in love that is lasting and highly prosperous; but in crossed and hopeless love are ills such as you may seize with closed eyes, past numbering; so that it is better to watch beforehand in the manner I have prescribed, and be on your guard not to be drawn in. For to avoid falling into the toils of love is not so hard as, after you are caught, to get out of the nets you are in and to break through the strong meshes of Venus. And yet even when you are entangled and held fast you may escape the mischief, unless you stand in your own way and begin by overlooking all the defects of her mind or those of her body, whoever it is whom you court and woo. For this men usually do, blinded by passion, and attribute to the beloved those advantages which are not really theirs. We therefore see women in ways manifold deformed and ugly to be objects of endearment and held in the highest admiration. And one lover jeers at others and advises them to propitiate Venus, since they are troubled by a disgraceful passion, and often, poor wretch, gives no thought to his own ills greatest of all. The black is a brune, the filthy and rank has not the love of order; the cat-eyed is a miniature Pallas, the stringy and wizened a gazelle; the dumpy and dwarfish is one of the graces, from top to toe all grace; the big and overgrown is

awe-inspiring and full of dignity. She is tongue-tied, cannot speak, then she has a lisp; the dumb is bashful; then the fire-spit, the teazing, the gossiping turns to a shining lamp. One becomes a slim darling then when she cannot live from want of flesh; and she is only spare, who is half-dead with cough. Then the fat and big-breasted is a Ceres' self big-breasted from Iacchus; the pug-nosed is a she Silenus and a satyress; the thick-lipped a very kiss. It were tedious to attempt to report other things of the kind. Let her however be of ever so great dignity of appearance; such that the power of Venus goes forth from all her limbs; yet there are others too; yet have we lived without her before; yet does she do, and we know that she does, in all things the same as the ugly woman; and fumigates herself, poor wretch, with nauseous perfumes, her very maids running from her and giggling behind her back. But the lover, when shut out, often in tears covers the threshold with flowers and wreaths, and anoints the haughty doorposts with oil of marjoram and imprints kisses, poor wretch, on the doors. When however he has been admitted, if on his approach but one single breath should come in his way, he would seek specious reasons for departing, and the long-conned deep-drawn complaint would fall to the ground; and then he would blame his folly, on seeing that he had attributed to her more than it is right to concede to a mortal. Nor is this unknown to our Venuses; wherefore all the more they themselves hide with the utmost pains all that goes on behind the scenes of life from those whom they wish to retain in the chains of love; but in vain, since you may yet draw forth from her mind into the light all these things and search into all her smiles; and if she is of a fair mind and not troublesome, overlook them in your turn and make allowance for human failings.

Nor does the woman sigh always with feigned passion, when she locks in her embrace and joins with her body the man's body and holds it, sucking his lips into her lips and drinking in his kisses. Often she does it from the heart, and seeking mutual joys courts him to run the complete race of love. And in no other way could birds cattle, wild beasts, sheep and mares submit to bear the males, except because the very exuberance of nature in the females is in heat and burns and joyously draws in the Venus of the covering males. See you not too how those whom mutual pleasure has chained are often tortured in their common chains? How often in the highways do dogs, desiring to separate, eagerly pull different ways with all their might, while all the time they are held fast in the strong fetters of Venus! This they would never do, unless they experienced mutual joys, strong enough to force them into the snare and hold them in its meshes. Wherefore again and again I repeat there is a common pleasure.

And when haply in mixing her seed with the man's the woman by sudden force has overpowered and seized for herself his force, then children are formed from the mothers' seed like to the mothers, as from the fathers' seed like to the fathers. But those whom you see with a share of both forms, blending equally the features of the parents, grow from the union of the father's body and the mother's blood, when the mutual ardour of desire working in concert has brought and clashed together the seeds roused throughout the frame by the goads of Venus; and neither of the two has gotten the mastery nor has been mastered. Sometimes too the children may spring up like their grandfathers and often resemble the forms of their grandfathers' fathers, because the parents often keep concealed in their bodies many first-beginnings mixed in many ways, which first proceeding from the original stock one father hands down to the next father; and then from these Venus produces forms after a manifold chance and repeats not only the features, but the voices and hair of their forefathers. And the female sex equally springs from the father's seed and males go forth equally formed from the mother's body; since these distinctions no more proceed from the fixed seed of one or other parent than our faces and bodies and limbs: the birth is always formed out of the two seeds; and whichever parent that which is produced more resembles, of that parent it has more than an equal share; as you may equally observe, whether it is a male child or a female birth.

Nor do the divine powers debar anybody from the power of begetting, forbidding him ever to receive the name of father from sweet children and forcing him to pass his life in a barren wedlock; as men commonly fancy when in sorrow they drench the altars with much blood and pile the raised altars with offer-

ings, to make their wives pregnant with abundant seed. In vain they weary the divinity of the gods and the sacred lots. They are barren sometimes from the too great thickness of the seed, sometimes from its undue fluidity and thinness: because the thin is unable to get a firm hold on the right spots, it at once passes away and is repelled and withdrawn abortively: since by others again a too thick seed is discharged in a state more solid than is suitable, it either does not fly forth with so prolonged a stroke or cannot equally pass into the proper spots or when it has passed in with difficulty mixes with the woman's seed. For well-assorted matches are found to be of great importance; and some males impregnate some females more readily than others, and other females conceive and become pregnant more readily from other males. And many women have hitherto been barren during several marriages and have yet in the end found mates from whom they could conceive children and be enriched with a sweet offspring. And often even for those, to whom hitherto wives however fruitful had been unable in their house to bear, has been found a compatible nature, enabling them to fortify their age with sons. Of such great importance is it, in order that seeds may agree and blend with seeds in a way to promote birth, whether the thick comes into contact with the fluid and the fluid with the thick. And on this point it matters much on what diet life is supported; for by some foods seed is thickened in the limbs, and by others again is thinned and wasted. And in what modes the intercourse goes on, is likewise of very great moment; for women are commonly thought to conceive more readily after the manner of wild beasts and quadrupeds, because the seeds in this way can find the proper spots in consequence of the position of the body. Nor have wives the least use for effeminate motions: a woman hinders and stands in the way of her own conceiving, when thus she acts; for she drives the furrow out of the direct course and path of the share and turns away from the proper spots the stroke of the seed. And thus for their own ends harlots are wont to move, in order not to conceive and lie in childbed frequently, and at the same time to render Venus more attractive to men. This our wives have surely no need of.

Sometimes too by no divine grace and arrows of Venus a

sorry woman of inferior beauty comes to be loved; for the wife sometimes by her own acts and accommodating manners and by elegant neatness of person readily habituates you to pass your life with her. Moreover custom renders love attractive; for that which is struck by oft-repeated blows however lightly, yet after long course of time is overpowered and gives way. See you not too that drops of water falling on stones after long course of time scoop a hole through these stones?

LUCRETIUS

ON THE NATURE OF THINGS

BOOK FIFTH

Who is able with powerful genius to frame a poem worthy of the grandeur of the things and these discoveries? or who is so great a master of words as to be able to devise praises equal to the deserts of him who left to us such prizes won and earned by his own genius? None methinks who is formed of mortal body. For if we must speak as the acknowledged grandeur of the things itself demands, a god he was, a god, most noble Memmius, who first found out that plan of life which is now termed wisdom, and who by trained skill rescued life from such great billows and such thick darkness and moored it in so perfect a calm and in so brilliant a light. Compare the godlike discoveries of others in old times: Ceres is famed to have pointed out to mortals corn, and Liber the vine-born juice of the grape; though life might well have subsisted without these things, as we are told some nations even now live without them. But a happy life was not possible without a clean breast; wherefore with more reason this man is deemed by us a god, from whom come those sweet solaces of existence which even now are distributed over great nations and gently soothe men's minds. Then if you shall suppose that the deeds of Hercules surpass his, you will be carried still farther away from true reason. For what would yon great gaping maw of Nemean lion now harm us and the bristled Arcadian boar? ay or what could the bull of Crete do and the hydra plague of Lerna, fenced round with its envenomed snakes? or how could the triple-breasted might of threefold Geryon, [how could the birds with brazen arrowy feathers] that dwelt in the Stymphalian swamps do us such mighty injury, and the horses of Thracian Diomede breathing fire from their nostrils along the Bistonian borders and Ismara? and the serpent which guards the bright golden apples of the Hesperides, fierce, dangerous of aspect, girding the tree's stem with his enormous body, what harm pray could he do us beside the Atlantic shore and its sounding main, which none of us goes near and no barbarian ventures to approach? And all other monsters of the kind which have been destroyed, if they had not been vanquished, what harm could they do, I ask, though now alive? None methinks: the earth even now so abounds to repletion in wild beasts and is filled with troublous terror throughout woods and great mountains and deep forests; places which we have it for the most part in our own power to shun. But unless the breast is cleared, what battles and dangers must then find their way into us in our own despite! what poignant cares inspired by lust then rend the distressful man, and then also what mighty fears! and pride, filthy lust and wantonness? what disasters they occasion! and luxury and all sorts of sloth? He therefore who shall have subdued all these and banished them from the mind by words, not arms, shall he not have a just title to be ranked among the gods? and all the more so that he was wont to deliver many precepts in beautiful and godlike phrase about the immortal gods themselves and to open up by his teachings all the nature of things.

While walking in his footsteps I follow out his reasonings and teach by my verses, by what law all things are made, what necessity there is then for them to continue in that law, and how impotent they are to annul the binding statutes of time: foremost in which class of things the nature of the mind has been proved to be formed of a body that had birth and to be unable to endure unscathed through great time, mere idols being wont to mock the mind in sleep, when we seem to see him whom life has abandoned: to continue, the order of my design has now brought me to this point, where I must proceed to shew that the world is formed of a mortal body and at the same time had birth; to shew too in what way that union of matter founded earth heaven sea stars sun and the ball of the moon; also what living creatures sprang out of the earth, as well as those which never at any time were born; in what way too mankind began to use with one another varied

speech by the names conferred on things; and also in what ways yon fear of the gods gained an entry into men's breasts, and now throughout the world maintains as holy fanes lakes groves altars and idols of the gods. Furthermore I shall make clear by what force piloting nature guides the courses of the sun and the wanderings of the moon; lest haply we imagine that these of their own free will between heaven and earth traverse their everlasting orbits, graciously furthering the increase of crops and living creatures, or we think they roll on by any forethought of the gods. For they who have been rightly taught that the gods lead a life without care, if nevertheless they wonder by what plan all things can be carried on, above all in regard to those things which are seen overhead in the ethereal borders, are borne back again into their old religious scruples and take unto themselves hard taskmasters, whom they poor wretches believe to be almighty, not knowing what can, what cannot be, in short by what system each thing has its powers defined, its deep-set boundary mark.

Well then not to detain you any longer by mere promises, look before all on seas and lands and heaven: their threefold nature, their three bodies, Memmius, three forms so unlike, three such wondrous textures a single day shall give over to destruction; and the mass and fabric of the world upheld for many years shall tumble to ruin. Nor can I fail to perceive with what a novel and strange effect it falls upon the mind, this destruction of heaven and earth that is to be, and how hard it is for me to produce a full conviction of it by words; as is the case when you bring to the ears a thing hitherto unexampled, and yet you cannot submit it to the eyesight nor put it into the hands; through which the straightest highway of belief leads into the human breast and quarters of the mind. But yet I will speak out: it well may be that the reality itself will bring credit to my words and that you will see earthquakes arise and all things grievously shattered to pieces in a short time. But this may pilot fortune guide far away from us, and may reason rather than the reality convince that all things may be overpowered and tumble in with a frightful crash.

But before I shall begin on this question to pour forth decrees of fate with more sanctity and much more certainty than the Pythia who speaks out from the tripod and laurel of Phoebus,

I will clearly set forth to you many comforting topics in learned language; lest held in the yoke of religion you haply suppose that earth and sun and heaven, sea stars and moon must last for ever with divine body; and therefore think it right that they after the fashion of the giants should all suffer punishment for their monstrous guilt, who by their reasoning displace the walls of the world and seek to quench the glorious sun of heaven, branding immortal things in mortal speech; though in truth these things are so far from possessing divinity and are so unworthy of being reckoned in the number of gods, that they may be thought to afford a notable instance of what is quite without vital motion and sense. For it is quite impossible to suppose that the nature and judgment of the mind can exist with any body whatever; even as a tree cannot exist in the ether nor clouds in the salt sea, nor can fishes live in the fields nor blood exist in woods nor sap in stones. Where each thing can grow and abide is fixed and ordained. Thus the nature of the mind cannot come into being alone without the body nor exist far away from the sinews and blood. But if (for this would be much more likely to happen than that) the force itself of the mind might be in the head or shoulders or heels or might be born in any other part of the body, it would after all be wont to abide in one and the same man or vessel. But since in our body even it is fixed and seen to be ordained where the soul and the mind can severally be and grow, it must still more strenuously be denied that it can abide out of the body and the living form altogether in crumbling clods of earth or in the fire of the sun or in water or in the high borders of ether. These things therefore are not possessed of divine sense, since they cannot be quickened with the vital feeling.

This too you may not possibly believe, that the holy seats of the gods exist in any parts of the world: the fine nature of the gods far withdrawn from our senses is hardly seen by the thought of the mind; and since it has ever eluded the touch and stroke of the hands, it must touch nothing which is tangible for us; for that cannot touch which does not admit of being touched in turn. And therefore their seats as well must be unlike our seats, fine, even as their bodies are fine. All which I will prove to you later in copious argument. To say again that for the sake of men they have willed to set in order the glorious nature of the world

and therefore it is meet to praise the work of the gods calling as it does for all praise, and to believe that it will be eternal and immortal, and that it is an unholy thing ever to shake by any force from its fixed seats that which by the forethought of the gods in ancient days has been established on everlasting foundations for mankind, or to assail it by speech and utterly overturn it from top to bottom; and to invent and add other figments of the kind, Memmius, is all sheer folly. For what advantage can our gratitude bestow on immortal and blessed beings, that for our sakes they should take in hand to administer aught? And what novel incident should have induced them hitherto at rest so long after to desire to change their former life? for it seems natural he should rejoice in a new state of things, whom old things annoy; but for him whom no ill has befallen in times gone by, when he passed a pleasant existence, what could have kindled in such a one a love of change? Did life lie grovelling in darkness and sorrow, until the first dawn of the birthtime of things? or what evil had it been for us never to have been born? whoever has been born must want to continue in life, so long as fond pleasure shall keep him; but for him who has never tasted the love, never been on the lists, of life, what harm not to have been born? Whence again was first implanted in the gods a pattern for begetting things in general as well as the preconception of what men are, so that they knew and saw in mind what they wanted to make? and in what way was the power of first-beginnings ever ascertained, and what they could effect by a change in their mutual arrangements, unless nature herself gave the model for making things? For in suchwise the first-beginnings of things many in number in many ways impelled by blows for infinite ages back and kept in motion by their own weights have been wont to be carried along and to unite in all manner of ways and thoroughly test every kind of production possible by their mutual combinations; that it is not strange if they have also fallen into arrangements and have come into courses like to those out of which this sum of things is now carried on by constant renewing.

But if I did not know what first-beginnings of things are, yet this judging by the very arrangements of heaven I would venture to affirm, and led by many other facts to maintain, that

the nature of things has by no means been made for us by divine power: so great are the defects with which it is encumbered. In the first place of all the space which the vast reach of heaven covers, a portion greedy mountains and forests of wild beasts have occupied, rocks and wasteful pools take up and the sea which holds wide apart the coasts of different lands. Next of nearly two thirds burning heat and the constant fall of frost rob mortals. What is left for tillage, even that nature by its power would overrun with thorns, unless the force of man made head against it, accustomed for the sake of a livelihood to groan beneath the strong hoe and to cut through the earth by pressing down the plough. Unless by turning up the fruitful clods with the share and labouring the soil of the earth we stimulate things to rise, they could not spontaneously come up into the clear air; and even then sometimes when things earned with great toil now put forth their leaves over the lands and are all in blossom, either the ethereal sun burns them up with excessive heats or sudden rains and cold frosts cut them off, and the blasts of the winds waste them by a furious hurricane. Again why does nature give food and increase to the frightful race of wild beasts dangerous to mankind both by sea and land? why do the seasons of the year bring diseases in their train? why stalks abroad untimely death? Then too the baby, like to a sailor cast away by the cruel waves, lies naked on the ground, speechless, wanting every furtherance of life, soon as nature by the throes of birth has shed him forth from his mother's womb into the borders of light: he fills the room with a rueful wauling, as well he may whose destiny it is to go through in life so many ills. But the different flocks herds and wild beasts grow up; they want no rattles; to none of them need be addressed the fond broken accents of the fostering nurse; they ask not different dresses according to the season; no nor do they want arms or lofty walls, whereby to protect their own, the earth itself and nature manifold in her works producing in plenty all things for all.

First of all, since the body of the earth and water and the light breath of air and burning heats, out of which this sum of things is seen to be formed, do all consist of a body that had a birth and is mortal, the whole nature of the world must be reckoned of a like body. For those things whose parts and mem-

bers we see to be of a body that had a birth and of forms that are mortal, we perceive to be likewise without exception mortal, and at the same time to have had a birth. Since therefore I see that the chiefest members and parts of the world are destroyed and begotten anew, I may be sure that for heaven and earth as well there has been a time of beginning and there will be a time of destruction.

And herein that you may not think I have unfairly seized on this point for myself, because I have assumed that earth and fire are mortal and have not doubted that water and air perish, and have said that these are likewise begotten and grow afresh, mark the proofs: first of all some portion of the earth, burnt up by constant suns, trampled by a multitude of feet, sends forth a cloud and flying eddies of dust, which the strong winds disperse over the whole air. Part too of the soil is put under water by rains, and rivers graze against and eat into the banks. Again whatever increases something else, is in its turn replenished; and since beyond a doubt earth the universal mother is found at the same time to be the general tomb of things, therefore you see she is lessened and increases and grows again.

Furthermore, that sea rivers fountains always stream over with new moisture and that waters well up without ceasing, it needs no words to prove: the great flow of waters from all sides clearly shews it. But then the water on the surface is always taken off, and thus it is that on the whole there is no overflow, partly because the seas are lessened by the strong winds sweeping over them and by the ethereal sun decomposing them with his rays; partly, because the water is diffused below the surface over all lands; for the salt is strained off and the matter of liquid streams back again to the source and all meets together at the river-heads, and then flows over the lands in a fresh current, where a channel once scooped out has carried down the waters with liquid foot.

And next I will speak of the air which is changed over its whole body every hour in countless ways. For whatever ebbs from things, is all borne always into the great sea of air; and unless it in return were to give back bodies to things and to recruit them as they ebb, all things ere now would have been dissolved and changed into air. It therefore ceases not to be begotten

from things and to go back again into things, since it is a fact that all things constantly ebb.

Likewise the abundant source of clear light, the ethereal sun, constantly floods heaven with fresh brightness and supplies the place of light on the instant by new light; for every previous emission of brightness is quite lost to it, wherever it falls. This you may know from the following examples: as soon as ever clouds begin to pass below the sun and to break off so to say the rays of light, forthwith their lower part is wholly lost, and the earth is overshadowed wherever the clouds pass over; so that you may know that things constantly require new irradiation and that all the preceding emissions of light are lost, and in no other way can things be seen in the sun, unless the fountain head of light itself send a supply. Moreover, you see, nightly lights which belong to earth, such as hanging lamps and torches bright with darting flames, hasten in like fashion amid great darkness with ministering heat to supply new light; are eager to bicker with fires, ay eager; nor is the light ever broken off nor does it quit the spots illuminated: with such suddenness is its destruction concealed by the swift birth of flame from all the fires at once. In the same way then we must believe that sun moon and stars emit light from fresh and ever fresh supplies rising up, and always lose every previous discharge of flames; that you may not haply believe that these flourish indestructible.

Again see you not that even stones are conquered by time, that high towers fall and rocks moulder away, that shrines and idols of gods are worn out with decay, and that the holy divinity cannot prolong the bounds of fate or struggle against the fixed laws of nature? Then see we not the monuments of men, fallen to ruin, ask for themselves as well whether you'd believe that *they* decay with years? see we not basalt rocks tumble down riven away from high mountains and unable to endure and suffer the strong might of finite age? surely they would never fall suddenly thus riven away, if for infinite time past they had held out against all the batteries of age without a crash.

Again gaze on this, which about and above holds in its embrace all the earth: if it begets all things out of itself, as some say, and takes them back when they are destroyed, then the whole of it has had a birth and is of a mortal body; for whatever

gives increase and food out of itself to other things, must be lessened; and must be replenished, when it takes things back.

Again if there was no birth-time of earth and heaven and they have been from everlasting, why before the Theban war and the destruction of Troy have not other poets as well sung other themes? whither have so many deeds of men so often passed away, why live they nowhere embodied in lasting records of fame? The truth methinks is that the sum has but a recent date and the nature of the world is new and has but lately had its commencement. Wherefore even now some arts are receiving their last polish, some are even in course of growth: just now many improvements have been made in ships; only yesterday musicians have given birth to tuneful melodies; then too this nature or system of things has been discovered lately, and I the very first of all have only now been found able to transfer it into native words. But if haply you believe that before this all things have existed just the same, but that the generations of men have perished by burning heat, or that cities have fallen by some great concussion of the world, or that after constant rains devouring rivers have gone forth over the earth and have whelmed towns, so much the more you must yield and admit that there will be entire destruction too of earth and heaven; for when things were tried by so great distempers and so great dangers, at that time had a more disastrous cause pressed upon them, they would far and wide have gone to destruction and mighty ruin. And in no other way are we proved to be mortals, except because we all alike in turn fall sick of the same diseases which those had whom nature has withdrawn from life.

Again whatever things last for ever, must either, because they are of solid body, repel strokes and not suffer aught to pass into them, sufficient to disunite the closely massed parts within: such are the bodies of matter whose nature we have shewn before: or they must be able to endure through all time for this reason, because they are exempt from blows, as void is which remains untouched and suffers not a jot from any stroke; or else because there is no extent of room around, into which things so to say may depart and be broken up: in this way the sum of sums is eternal and there is no place outside into which things may spring asunder, nor are there any bodies which can fall upon

them and dissolve them by a powerful blow. But the nature of the world, as I have shewn, is neither of solid body, since void is mixed up in things, nor is it again like void, no nor is there lack of bodies that may haply rise up in mass out of the infinite and overthrow this sum of things with furious tornado or bring upon them some other perilous disaster; nor further is the nature of room or the space of deep void wanting, into which the walls of the world may be scattered abroad; or they may be assailed and perish by some other force. Therefore the gate of death is not closed against heaven or sun or earth or the deep waters of the sea, but stands open and looks towards them with huge wide-gaping maw. And therefore also you must admit that these things likewise had a birth; for things which are of mortal body could not for an infinite time back up to the present have been able to set at naught the puissant strength of immeasurable age.

Again since the chiefest members of the world fight so hotly together, fiercely stirred by no hallowed civil warfare, see you not that some limit may be set to their long struggle? either when the sun and all heat shall have drunk up all the waters and gotten the mastery: this they are ever striving to do, but as yet are unable to accomplish their endeavours: such abundant supplies the rivers furnish, and threaten to turn aggressors and flood all things with a deluge from the deep gulfs of ocean; all in vain, since the winds sweeping over the seas and the ethereal sun decomposing them with his rays do lessen them, and trust to be able to dry all things up before water can attain the end of its endeavour. Such a war do they breathe out with undecided issue, and strive with each other to determine it for mighty ends; though once by the way fire got the upper hand and once, as the story goes, water reigned paramount in the fields. Fire gained the mastery and licked and burnt up many things, when the headstrong might of the horses of the sun dashed from the course and hurried Phaethon through the whole sky and over all lands. But the almighty father, stirred then to fierce wrath, with a sudden thunderstroke dashed Phaethon down from his horses to earth, and the sun meeting him as he fell caught from him the ever-burning lamp of the world and got in hand the scattered steeds and yoked them shaking all over; then guided them on their proper course and gave fresh life to all

things. Thus to wit have the old poets of the Greeks sung; though it is all too widely at variance with true reason. Fire may gain the mastery when more bodies of matter than usual have gathered themselves up out of the infinite; and then its powers decay, vanquished in some way or other, or else things perish burnt up by the torrid air. Water too of yore gathered itself and began to get the mastery, as the story goes, when it whelmed many cities of men; and then when all that force that had gathered itself up out of the infinite, by some means or other was turned aside and withdrew, the rains were stayed and the rivers abated their fury.

But in what ways yon concourse of matter founded earth and heaven and the deeps of the sea, the courses of the sun and moon, I will next in order describe. For verily not by design did the first-beginnings of things station themselves each in its right place by keen intelligence, nor did they bargain sooth to say what motions each should assume, but because the first-beginnings of things many in number in many ways impelled by blows for infinite ages back and kept in motion by their own weights have been wont to be carried along and to unite in all manner of ways and thoroughly to test every kind of production possible by their mutual combinations, therefore it is that spread abroad through great time after trying unions and motions of every kind they at length meet together in those masses which suddenly brought together become often the rudiments of great things, of earth sea and heaven and the race of living things.

At this time then neither could the sun's disk be discerned flying aloft with its abundant light, nor the stars of great ether, nor sea nor heaven, no nor earth nor air, nor could any thing be seen like to our things, but only a strange stormy crisis and medley, gathered together out of first-beginnings of every kind, whose state of discord joining battle disordered their interspaces passages connexions weights blows clashings and motions, because by reason of their unlike forms and varied shapes they could not all remain thus joined together nor fall into mutually harmonious motions. Then next the several parts began to fly asunder and things to be joined like with like and to mark off the world and portion out its members and arrange its mighty parts, that is to say, to separate high heaven from earth, and let the sea spread

itself out apart with its unmixed water, and likewise let the fires of ether spread apart pure and unmixed.

For first the several bodies of earth, because they were heavy and closely entangled, met together in the middle and took up all of them the lowest positions; and the more they got entangled and the closer their union, the more they squeezed out those particles which were to make up sea stars sun and moon and the walls of the great world. All these are of smooth and round seeds and of much smaller elements than the earth. Therefore the fire-laden ether first burst out from the different parts of the earth through all the porous openings and lightly bore off with itself many fires; much in the same way as we often see, so soon as the morning light of the beaming sun blushes golden over the grass jewelled with dew, and the pools and the ever-running rivers exhale a mist, and even as the earth itself is sometimes seen to smoke; and when all these are gathered together aloft, then do clouds on high with a now cohering body weave a covering beneath heaven. In this way therefore then the light and expansive ether with its now cohering body swept round and arched itself on all sides and expanding widely in all directions round in this way fenced all other things in with its greedy grasp. After it followed the rudiments of sun and moon, whose spheres turn round in air midway between earth and ether: these neither earth has taken unto itself nor greatest ether, because they were neither heavy enough to sink and settle down nor light enough to glide along the uppermost borders; they yet however are so placed between the two as to wheel along their life-like bodies and still to be parts of the whole world; just as in us some members may be at rest, while others at the same time are in motion. These things then being withdrawn, the earth in those parts where the vast azure level of ocean now spreads, in a moment sank in and drenched with salt flood the hollows. And every day the more the heats of ether round and the rays of the sun on all sides compressed the earth into a close mass by oft-repeated blows on all its outer edges, so that thus buffeted it was condensed and drawn together about its centre, ever the more did the salt sweat squeezed out of its body increase by its oozings the sea and floating fields, and ever the more did those many bodies of heat and air escape and fly abroad and condense far away from earth the high glittering

quarters of heaven. The plains sank down, the high hills grew in elevation; for the rocks could not settle down nor all the parts sink to one uniform level.

Thus then the ponderous mass of earth was formed with close-cohering body and all the slime of the world so to speak slid down by its weight to the lowest point and settled at the bottom like dregs. Then the sea, then the air, then the fire-laden ether itself, all are left unmixed with their clear bodies; and some are lighter than others, and clearest and lightest of all ether floats upon the airy currents, and blends not its clear body with the troubled airs; it suffers all these things below to be upset with furious hurricanes, suffers them to be troubled by wayward storms; while it carries along its own fires gliding with a changeless onward sweep. For that ether may stream on gently and with one uniform effort the Pontos shews, a sea which streams with a changeless current, ever preserving one uniform gliding course.

Let us now sing what causes the motions of the stars. In the first place, if the great sphere of heaven revolves, we must say that an air presses on the pole at each end and confines it on the outside and closes it in at both ends; and then that a third air streams above and moves in the same direction in which roll on as they shine the stars of the eternal world; or else that this third air streams below in order to carry up the sphere in the contrary direction; just as we see rivers turn wheels and water-scoops. It is likewise quite possible too that all the heaven remains at rest, while at the same time the glittering signs are carried on; either because rapid heats of ether are shut in and whirl round while seeking a way out and roll their fires in all directions through heaven's Summanian quarters; or else an air streaming from some part from another source outside drives and whirls the fires; or else they may glide on of themselves going whithersoever the food of each calls and invites them, feeding their flamy bodies everywhere throughout heaven. For which of these causes is in operation in this world, it is not easy to affirm for certain; but what can be and is done throughout the universe in various worlds formed on various plans, this I teach, and I go on to set forth several causes which may exist throughout the universe for the motions of stars; one of which however must in this world also be the cause that imparts lively motion to the signs; but to dictate

which of them it is, is by no means the duty of the man who advances step by step.

And in order that the earth may rest in the middle of the world, it is proper that its weight should gradually pass away and be lessened, and that it should have another nature underneath it conjoined from the beginning of its existence and formed into one being with the airy portions of the world in which it is embodied and lives. For this reason it is no burden and does not weigh down the air; just as his limbs are of no weight to a man nor is his head a burden to his neck, nor do we feel that the whole weight of the body rests on the feet; but whatever weights come from without and are laid upon us, hurt us though they are often very much smaller: of such great moment it is what function each thing has to perform. Thus then the earth is not an alien body suddenly brought in and forced from some other quarter on air alien to it, but was conceived together with it at the first birth of the world and is a fixed portion of that world, just as our limbs are seen to be to us. Again the earth when suddenly shaken by loud thunder shakes by its motion all the things which are above it; and this it could in no wise do, unless it had been fast bound with the airy portions of the world and with heaven. For the earth and they cohere with one another by common roots, conjoined and formed into a single being from the beginning of their existence. See you not too that great as is the weight of our body, the force of the soul, though of the extremest fineness, supports it, because it is so closely conjoined and formed into a single being with it? Then too what is able to lift the body with a nimble bound save the force of the mind which guides the limbs? Now do you see what power a subtle nature may have, when it is conjoined with a heavy body, as the air is conjoined with the earth and the force of the mind with us?

Again the disk of the sun cannot be much larger nor its body of heat much smaller, than they appear to be to our senses. For from whatever distances fires can reach us with their light and breathe on our limbs burning heat, those distances take away nothing by such spaces between from the body of the flames, the fire is not in the least narrowed in appearance. Therefore since the heat of the sun and the light which it sheds reach our senses

and stroke the proper places, the form too and size of the sun must be seen from this earth in their real dimensions, so that you may not add anything whatever more or less. And whether the moon as it is borne on illuminates places with a borrowed light, or emits its own light from its own body, whatever that is, the form with which it is thus borne on is not at all larger than the one which it presents to our eyes seems to us to be. For all things which we see at a great distance through much air, look dimmed in appearance before their size is diminished. Therefore since the moon presents a bright aspect and well-defined form, it must be seen on high by us from this earth precisely such as it is in the outline which defines it, and of the size it actually is. Lastly in the case of all those fires of ether which you observe from this earth,—since in the case of fires which we see here on earth, so long as their flickering is distinct, so long as their heat is perceived, their size is seen sometimes to change to a very very small extent either way, according to the distance at which they are,—you may infer that the fires of ether may be smaller than they look in an extremely minute degree, or larger by a very small and insignificant fraction.

This likewise need not excite wonder, how it is that so small a body as yon sun can emit so great a light, enough to flood completely seas and all lands and heaven and to steep all things in its burning heat. It well may be that a single spring for the whole world may open up from this spot and gush out in plenteous stream and shoot forth light, because elements of heat meet together from all sides out of the whole world in such manner and the mass of them thrown together streams to a point in such manner, that this heat wells forth from a single source. See you not too what a breadth of meadow-land a small spring of water sometimes floods, streaming out over the fields? It is likewise possible that heat from the sun's flame though not at all great may infect the whole air with fervent fires, if haply the air is in a suitable and susceptible state, so that it can be kindled when struck by small bodies of heat; thus we see sometimes a general conflagration from a single spark catch fields of corn and stubble. Perhaps too the sun as he shines aloft with rosy lamp has round about him much fire with heats that are not visible, and thus the fire may be marked by no radiance, so that

fraught with heat it increases to such a degree the stroke of the rays.

Nor with regard to the sun is there one single explanation, certain and manifest, of the way in which he passes from his summer positions to the midwinter turning-point of capricorn and then coming back from thence bends his course to the solstitial goal of cancer, and how the moon is seen once a month to pass over that space, in traversing which the sun spends the period of a year. No single plain cause, I say, has been assigned for these things. It seems highly probable that that may be the truth which the revered judgment of the worthy man Democritus maintains: the nearer the different constellations are to the earth, the less they can be carried along with the whirl of heaven; for the velocity of its force, he says, passes away and the intensity diminishes in the lower parts, and therefore the sun is gradually left behind with the rearward signs, because he is much lower than the burning signs. And the moon more than the sun: the lower her path is and the more distant she is from heaven and the nearer she approaches to earth, the less she can keep pace with the signs. For the fainter the whirl is in which she is borne along, being as she is lower than the sun, so much the more all the signs around overtake and pass her. Therefore it is that she appears to come back to every sign more quickly, because the signs go more quickly back to her. It is quite possible too that from quarters of the world crossing the sun's path two airs may stream each in its turn at a fixed time; one of which may force the sun away from the summer signs so far as his midwinter turning-point and freezing cold, and the other may force him back from the freezing shades of cold as far as the heat-laden quarters and burning signs. And in like manner we must suppose that the moon, and the stars which make revolutions of great years in great orbits may pass by means of airs from opposite quarters in turn. See you not too that clouds from contrary winds pass in contrary directions, the upper in a contrary way to the lower? Why may not yon stars just as well be borne on through their great orbits in ether by currents contrary one to the other?

But night buries the earth in thick darkness, either when the sun after his long course has struck upon the utmost parts of heaven and now exhausted has blown forth all his fires shaken

by their journey and weakened by passing through much air; or else because the same force which has carried on his orb above the earth, compels him to change his course and pass below the earth.

At a fixed time too Matuta spreads rosy morning over the borders of ether and opens up her light, either because the same sun, coming back below the earth, seizes heaven before his time trying to kindle it with his rays; or because fires meet together and many seeds of heat are accustomed to stream together at a fixed time, which cause new sunlight to be born every day. Thus they tell that from the high mountains of Ida scattered fires are seen at day-break, that these then unite as it were into a single ball and make up an orb. And herein it ought to cause no surprise that these seeds of fire stream together at a time so surely fixed and reproduce the radiance of the sun. For we see many occurrences which take place at a fixed time in all things. At a fixed time trees blossom and at a fixed time shed their blossoms; and at a time no less surely fixed age bids the teeth be shed and the boy put on the soft dress of puberty and let a soft beard fall down equally from each cheek. Lastly lightnings snow rains clouds and winds take place at not very irregular seasons of year. For where causes from their very first beginnings have been in this way and things have thus fallen out from the first birth of the world, in due sequence too they now come round after a fixed order.

Likewise days may lengthen and nights wane, and days shorten when the nights receive increase, either because the same sun running his course below the earth and above in curves of unlike length parts the borders of ether and divides his orbit into unequal halves; and as he comes round adds on in the opposite half just as much as he has subtracted from the other of the two halves, until he has arrived at that sign of heaven, where the node of the year makes the shades of night of the same length as the daylight. For when the sun's course lies midway between the blast of the north and of the south, heaven keeps his two goals apart at distances now rendered exactly equal on account of the position of the whole starry circle, in gliding through which the sun takes up the period of a year, lighting with slanting rays earth and heaven; as is clearly shewn by the plans of those who

have mapped out all the quarters of heaven as they are set off with their array of signs. Or else because the air is denser in certain parts, therefore the quivering beam of fire is retarded below the earth and cannot easily pass through and force its way out to its place of rising: for this reason in winter-time nights linger long, ere the beamy badge of day arrive. Or else, because in the way just mentioned at alternate parts of the year fires are accustomed to stream together more slowly and more quickly, which cause the sun to rise in a certain point, therefore it is that those appear to speak the truth [who suppose a fresh sun to be born every day].

The moon may shine because struck by the sun's rays, and turn that light every day more and more directly towards our sight, in proportion as she recedes from the sun's orb, until just opposite to him she has shone out with full light and at her rising as she soars aloft has beheld his setting; and then by slow steps reversing as it were her course she must in the same way hide her light, the nearer and nearer she now glides to the sun from a different quarter through the circle of the signs; according to the theory of those who suppose the moon to be like a ball and to hold on her course under the sun. She may also very possibly revolve with her own light and display various phases of brightness; for there may well be another body which is carried on and glides in her company getting before her path and obstructing her in all manner of ways and yet cannot be seen, because it glides on without light. She may also revolve, like it may be to a spherical ball steeped over one half in shining light, and as she rolls round this sphere she may present changing phases, until she has turned that half which is illuminated full towards our sight and open eyes; then by slow steps she whirls back and withdraws the light-fraught half of the spherical ball; as the Babylonian science of the Chaldees refuting the system of the astronomers essays to prove in opposition to them; just as though that which each party fights for might not be equally true, or there were any reason why you should venture to embrace the one theory less than the other. Again, why a new moon should not be born every day after a regular succession of forms and regular phases, and each day the one which is born perish and another be produced in its room and stead, it is not easy to teach

by reasoning or prove by words, since so many things can be born in such a regular succession. Spring and Venus go their way, and the winged harbinger of Venus steps on before; and close on Zephyr's footprints mother Flora straws all the way before them and covers it over with the choicest colours and odours. Next in order follows parching heat, and in its company dusty Ceres and the etesian blasts of the north winds. Next autumn advances and Euhius Euan steps on together. Then other seasons and winds follow, loud-roaring Volturnus and the southwind stored with lightning. At last midwinter brings with it snows and gives back benumbing cold; after it follows winter with teeth chattering with cold. It is therefore the less strange that a moon is begotten at a fixed time and at a fixed time is destroyed again, since many things may take place at a time so surely fixed.

The eclipses of the sun likewise and the obscurations of the moon you may suppose to take place from many different causes. For why should the moon be able to shut the earth out from the sun's light and on the earthward side put in his way her high-exalted head, placing her dark orb before his burning rays; and yet at the same time it be thought that another body gliding on ever without light cannot do the same? Why too should not the sun be able, quite exhausted, to lose his fires at a fixed time, and again reproduce his light when in his journey through the air he has passed by spots fatal to his flames, which cause his fires to be quenched and to perish? And why should the earth be able in turn to rob the moon of light and moreover herself to keep the sun suppressed, while in her monthly course she glides through the well-defined shadows of the cone; and yet at the same time another body not be able to pass under the moon or glide above the sun's orb, breaking off its rays and the light it sheds forth? Yes and if the moon shines with her own brightness, why should she not be able to grow faint in a certain part of the world, while she is passing through spots hostile to her own light?

And now further since I have explained in what way every thing might take place throughout the blue of the great heaven; how we might know what force and cause set in motion the varied courses of the sun and wanderings of the moon; and in what way their light might be intercepted and they be lost to us and spread darkness over the earth little expecting it, when

so to speak they close their eye of light and opening it again survey all places shining in bright radiance, I now go back to the infancy of the world and the tender age of the fields of earth and shew what first in their early essays of production they resolved to raise into the borders of light and give in charge to the wayward winds.

In the beginning the earth gave forth all kinds of herbage and verdant sheen about the hills and over all the plains; the flowery meadows glittered with the bright green hue, and next in order to the different trees was given a strong and emulous desire of growing up into the air with full unbridled powers. As feathers and hairs and bristles are first born on the limbs of four-footed beasts and the body of the strong of wing, thus the new earth then first put forth grass and bushes, and next gave birth to the races of mortal creatures springing up many in number in many ways after divers fashions. For no living creatures can have dropped from heaven nor can those belonging to the land have come out of the salt pools. It follows that with good reason the earth has gotten the name of mother, since all things have been produced out of the earth. And many living creatures even now spring out of the earth taking form by rains and the heat of the sun. It is therefore the less strange if at that time they sprang up more in number and larger in size, having come to maturity in the freshness of earth and ether. First of all the race of fowls and the various birds would leave their eggs, hatched in the springtime, just as now in summer the cicades leave spontaneously their gossamer coats in quest of a living and life. Then you must know did the earth first give forth races of mortal men. For much heat and moisture would then abound in the fields; and therefore wherever a suitable spot offered, wombs would grow attached to the earth by roots; and when the warmth of the infants, flying the wet and craving the air, had opened these in the fulness of time, nature would turn to that spot the pores of the earth and constrain it to yield from its opened veins a liquid most like to milk, even as now-a-days every woman when she has borne, is filled with sweet milk, because all that current of nutriment streams towards the breasts. To the children the earth would furnish food, the heat raiment, the grass a bed rich in abundance of soft down. Then the fresh youth of the world

would give forth neither severe colds nor excessive heats nor gales of great violence; for all things grow and acquire strength in a like proportion.

Wherefore again and again I say the earth with good title has gotten and keeps the name of mother, since she of herself gave birth to mankind and at a time nearly fixed shed forth every beast that ranges wildly over the great mountains, and at the same time the fowls of the air with all their varied shapes. But because she must have some limit set to her bearing, she ceased like a woman worn out by length of days. For time changes the nature of the whole world and all things must pass on from one condition to another, and nothing continues like to itself: all things quit their bounds, all things nature changes and compels to alter. One thing crumbles away and is worn and enfeebled with age, then another comes unto honour and issues out of its state of contempt. In this way then time changes the nature of the whole world and the earth passes out of one condition into another: what once it could, it can bear no more, in order to be able to bear what before it did not bear.

And many monsters too the earth at that time essayed to produce, things coming up with strange face and limbs, the man-woman, a thing between the two and neither the one sex nor the other, widely differing from both; some things deprived of feet, others again destitute of hands, others too proving dumb without mouth, or blind without eyes, and things bound fast by the adhesion of their limbs over all the body, so that they could not do anything nor go anywhere nor avoid the evil nor take what their needs required. Every other monster and portent of this kind she would produce, but all in vain, since nature set a ban on their increase and they could not reach the coveted flower of age nor find food nor be united in marriage. For we see that many conditions must meet together in things in order that they may beget and continue their kinds; first a supply of food, then a way by which the birth-producing seeds throughout the frame may stream from the relaxed limbs; also in order that the woman may be united with the male, the possession of organs whereby they may each interchange mutual joys.

And many races of living things must then have died out and been unable to beget and continue their breed. For in the case

of all things which you see breathing the breath of life, either craft or courage or else speed has from the beginning of its existence protected and preserved each particular race. And there are many things which, recommended to us by their useful services, continue to exist consigned to our protection. In the first place the fierce breed of lions and the savage races their courage has protected, foxes their craft and stags their proneness to flight. But light-sleeping dogs with faithful heart in breast and every kind which is born of the seed of beasts of burden and at the same time the woolly flocks and the horned herds are all consigned, Memmius, to the protection of man. For they have ever fled with eagerness from wild beasts and have ensued peace and plenty of food obtained without their own labour, as we give it in requital of their useful services. But those to whom nature has granted none of these qualities, so that they could neither live by their own means nor perform for us any useful service in return for which we should suffer their kind to feed and be safe under our protection, those, you are to know, would lie exposed as a prey and booty of others, hampered all in their own death-bringing shackles, until nature brought that kind to utter destruction.

But Centaurs never have existed, and at no time can there exist things of twofold nature and double body formed into one frame out of limbs of alien kinds, such that the faculties and powers of this and that portion cannot be sufficiently like. This however dull of understanding you may learn from what follows. To begin, a horse when three years have gone round is in the prime of his vigour, far different the boy: often even at that age he will call in his sleep for the milk of the breast. Afterwards when in advanced age his lusty strength and limbs now faint with ebbing life fail the horse, then and not till then youth in the flower of age commences for that boy and clothes his cheeks in soft down; that you may not haply believe that out of a man and the burden-carrying seed of horses Centaurs can be formed and have being; or that Scyllas with bodies half those of fishes girdled round with raving dogs can exist, and all other things of the kind, whose limbs we see cannot harmonise together; as they neither come to their flower at the same time nor reach the fulness of their bodily strength nor lose it in advanced old age,

nor burn with similar passions nor have compatible manners, nor feel the same things give pleasure throughout their frames. Thus we may see bearded goats often fatten on hemlock which for man is rank poison. Since flame moreover is wont to scorch and burn the tawny bodies of lions just as much as any other kind of flesh and blood existing on earth, how could it be that a single chimera with triple body, in front a lion, behind a dragon, in the middle the goat whose name it bears, could breathe out at the mouth fierce flame from its body? Wherefore also he who fables that in the new time of the earth and the fresh youth of heaven such living creatures could have been begotten, resting upon this one futile term new, may babble out many things in like fashion, may say that rivers then ran with gold over all parts of the earth, and that trees were wont to blossom with precious stones, or that man was born with such giant force of frame that he could wade on foot across deep seas and whirl the whole heaven about him with his hands. For the fact that there were many seeds of things in the earth what time it first shed forth living creatures, is yet no proof that there could have been produced beasts of different kinds mixed together, and limbs of different living things formed into a single frame, because the kinds of herbage and corn and joyous trees which even now spring in plenty out of the earth yet cannot be produced with the several sorts plaited into one, but each thing goes on after its own fashion, and all preserve their distinctive differences according to a fixed law of nature.

But the race of man then in the fields was much hardier, as beseemed it to be, since the hard earth had produced it; and built on a groundwork of larger and more solid bones within, knit with powerful sinews throughout the frame of flesh; not lightly to be disabled by heat or cold or strange kinds of food or any malady of body. And during the revolution of many lustres of the sun through heaven they led a life after the roving fashion of wild beasts. No one then was a sturdy guider of the bent plough or knew how to labour the fields with iron or plant in the ground young saplings or lop with pruning-hooks old boughs from the high trees. What the sun and rains had given, what the earth had produced spontaneously, was guerdon sufficient to content their hearts. Among acorn-bearing oaks they

would refresh their bodies for the most part; and the arbute-berries which you now see in the winter-time ripen with a bright scarlet hue, the earth would then bear in greatest plenty and of a larger size; and many coarse kinds of food besides the teeming freshness of the world then bare, more than enough for poor wretched men. But rivers and springs invited to slake thirst, even as now a rush of water down from the great hills summons with clear plash far and wide the thirsty races of wild beasts. Then too as they ranged about they would occupy the well-known woodland haunts of the nymphs, out of which they knew that smooth-gliding streams of water with a copious gush bathed the dripping rocks, the dripping rocks, trickling down over the green moss; and in parts welled and bubbled out over the level plain. And as yet they knew not how to apply fire to their purposes or to make use of skins and clothe their body in the spoils of wild beasts, but they would dwell in woods and mountain-caves and forests and shelter in the brushwood their squalid limbs when driven to shun the buffeting of the winds and the rains. And they were unable to look to the general weal and knew not how to make a common use of any customs or laws. Whatever prize fortune threw in his way, each man would bear off, trained at his own discretion to think of himself and live for himself alone. And Venus would join the bodies of lovers in the woods; for each woman was gained over either by mutual desire or the headstrong violence and vehement lust of the man or a bribe of some acorns and arbute-berries or choice pears. And trusting to the marvellous powers of their hands and feet they would pursue the forest-haunting races of wild beasts with showers of stones and club of ponderous weight; and many they would conquer, a few they would avoid in hiding-places; and like to bristly swine just as they were they would throw their savage limbs all naked on the ground, when overtaken by night, covering themselves up with leaves and boughs. Yet never with loud wailings would they call for the daylight and the sun, wandering terror-stricken over the fields in the shadows of night, but silent and buried in sleep they would wait, till the sun with rosy torch carried light into heaven; for accustomed as they had been from childhood always to see darkness and light begotten time about, never could any wonder come

over them, nor any misgiving that never-ending night would cover the earth and the light of the sun be withdrawn for evermore. But what gave them trouble was rather the races of wild beasts which would often render repose fatal to the poor wretches. And driven from their home they would fly from their rocky shelters on the approach of a foaming boar or a strong lion, and in the dead of night they would surrender in terror to their savage guests their sleeping-places strawn with leaves.

Nor then much more than now would the races of mortal men leave the sweet light of ebbing life. For then this one or that other one of them would be more likely to be seized, and torn open by their teeth would furnish to the wild beasts a living food, and would fill with his moaning woods and mountains and forests as he looked on his living flesh buried in a living grave. But those whom flight had saved with body eaten into, holding ever after their quivering palms over the noisome sores would summon death with appalling cries, until cruel gripings had rid them of life, forlorn of help, unwitting what wounds wanted. But then a single day gave not over to death many thousands of men marching with banners spread, nor did the stormy waters of the sea dash on the rocks men and ships. At this time the sea would often rise up and rage without aim, without purpose, without result, and just as lightly put off its empty threats; nor could the winning wiles of the calm sea treacherously entice any one to his ruin with laughing waters, when the reckless craft of the skipper had not yet risen into the light. Then too want of food would consign to death their fainting frames, now on the contrary 'tis plenty sinks into ruin. They unwittingly would often pour out poison for themselves; now with nicer skill men give it to their son's wife instead.

Next after they had got themselves huts and skins and fire, and the woman united with the man passed with him into one [domicile and the duties of wedlock were] learnt [by the two], and they saw an offspring born from them, then first mankind began to soften. For fire made their chilled bodies less able now to bear the frost beneath the canopy of heaven, and Venus impaired their strength and children with their caresses soon broke down the haughty temper of parents. Then too neighbours began to join in a league of friendship mutually desiring neither to do

nor suffer harm; and asked for indulgence to children and womankind, when with cries and gestures they declared in stammering speech that meet it is for all to have mercy on the weak. And though harmony could not be established without exception, yet a very large portion observed their agreements with good faith, or else the race of man would then have been wholly cut off, nor could breeding have continued their generations to this day.

But nature impelled them to utter the various sounds of the tongue and use struck out the names of things, much in the same way as the inability to speak is seen in its turn to drive children to the use of gestures, when it forces them to point with the finger at the things which are before them. For every one feels how far he can make use of his peculiar powers. Ere the horns of a calf are formed and project from his forehead, he butts with it when angry and pushes out in his rage. Then whelps of panthers and cubs of lions fight with claws and feet and teeth at a time when teeth and claws are hardly yet formed. Again we see every kind of fowl trust to wings and seek from pinions a fluttering succour. Therefore to suppose that some one man at that time apportioned names to things and that men from him learnt their first words, is sheer folly. For why should this particular man be able to denote all things by words and to utter the various sounds of the tongue, and yet at the same time others be supposed not to have been able to do so? Again if others as well as he had not made use of words among themselves, whence was implanted in this man the previous conception of its use and whence was given to him the original faculty, to know and perceive in mind what he wanted to do? Again one man could not constrain and subdue and force many to choose to learn the names of things. It is no easy thing in any way to teach and convince the deaf of what is needful to be done; for they never would suffer nor in any way endure sounds of voice hitherto unheard to continue to be dinned fruitlessly into their ears. Lastly what is there so passing strange in this circumstance, that the race of men whose voice and tongue were in full force, should denote things by different words as different feelings prompted? since dumb brutes, yes and the races of wild beasts are accustomed to give forth distinct and varied sounds, when they have

fear or pain and when joys are rife. This you may learn from facts plain to sense: when the large spongy open lips of Molossian dogs begin to growl enraged and bare their hard teeth, thus drawn back in rage they threaten in a tone far different from that in which they bark outright and fill with sounds all the places round. Again when they essay fondly to lick their whelps with their tongue or when they toss them with their feet and snapping at them make a feint with lightly closing teeth of swallowing though with gentle forbearance, they caress them with a yelping sound of a sort greatly differing from that which they utter when left alone in a house they bay or when they slink away howling from blows with a crouching body. Again is not the neigh too seen to differ, when a young stallion in the flower of age rages among the mares smitten by the goads of winged love, and when with wide-stretched nostrils he snorts out the signal to arms, and when as it chances on any other occasion he neighs with limbs all shaking? Lastly the race of fowls and various birds, hawks and osprays and gulls seeking their living in the salt water mid the waves of the sea, utter at a different time noises widely different from those they make when they are fighting for food and struggling with their prey. And some of them change together with the weather their harsh croakings, as the long-lived races of crows and flocks of rooks when they are said to be calling for water and rain and sometimes to be summoning winds and gales. Therefore if different sensations compel creatures, dumb though they be, to utter different sounds, how much more natural it is that mortal men in those times should have been able to denote dissimilar things by many different words!

And lest haply on this head you ask in silent thought this question, it was lightning that brought fire down on earth for mortals in the beginning; thence the whole heat of flames is spread abroad. Thus we see many things shine dyed in heavenly flames, when the stroke from heaven has stored them with its heat. Ay and without this when a branching tree sways to and fro and tosses about under the buffeting of the winds, pressing against the boughs of another tree, fire is forced out by the power of the violent friction, and sometimes the burning heat of flame flashes out, the boughs and stems rubbing against each other

Now either of these accidents may have given fire to men. Next the sun taught them to cook food and soften it with the heat of flame, since they would see many things grow mellow, when subdued by the strokes of the rays and by heat throughout the land.

And more and more every day men who excelled in intellect and were of vigorous understanding, would kindly shew them how to exchange their former way of living for new methods. Kings began to build towns and lay out a citadel as a place of strength and of refuge for themselves, and divided cattle and lands and gave to each man in proportion to his personal beauty and strength and intellect; for beauty and vigorous strength were much esteemed. Afterwards wealth was discovered and gold found out, which soon robbed of their honours strong and beautiful alike; for men however valiant and beautiful of person generally follow in the train of the richer man. But were a man to order his life by the rules of true reason, a frugal subsistence joined to a contented mind is for him great riches; for never is there any lack of a little. But men desired to be famous and powerful, in order that their fortunes might rest on a firm foundation and they might be able by their wealth to lead a tranquil life; but in vain, since in their struggle to mount up to the highest dignities they rendered their path one full of danger; and even if they reach it, yet envy like a thunderbolt sometimes strikes and dashes men down from the highest point with ignominy into noisome Tartarus; since the highest summits and those elevated above the level of other things are mostly blasted by envy as by a thunderbolt; so that far better it is to obey in peace and quiet than to wish to rule with power supreme and be the master of kingdoms. Therefore let men wear themselves out to no purpose and sweat drops of blood, as they struggle on along the strait road of ambition, since they gather their knowledge from the mouths of others and follow after things from hearsay rather than the dictates of their own feelings; and this prevails not now nor will prevail by and bye any more than it has prevailed before.

Kings therefore being slain the old majesty of thrones and proud sceptres were overthrown and laid in the dust, and the glorious badge of the sovereign head bloodstained beneath the feet of the rabble mourned for its high prerogative; for that is greedily trampled on which before was too much dreaded. It would come

then in the end to the lees of uttermost disorder, each man seeking for himself empire and sovereignty. Next a portion of them taught men to elect legal officers, and drew up codes, to induce men to obey the laws. For mankind, tired out with a life of brute force, lay exhausted from its feuds; and therefore the more readily it submitted of its own freewill to laws and stringent codes. For as each one moved by anger took measures to avenge himself with more severity than is now permitted by equitable laws, for this reason men grew sick of a life of brute force. Thence fear of punishment mars the prizes of life; for violence and wrong enclose all who commit them in their meshes and do mostly recoil on him from whom they began; and it is not easy for him who by his deeds transgresses the terms of the public peace to pass a tranquil and a peaceful existence. For though he eludes God and man, yet he cannot but feel a misgiving that his secret can be kept for ever; seeing that many by speaking in their dreams or in the wanderings of disease have often we are told betrayed themselves and have disclosed their hidden deeds of evil and their sins.

And now what cause has spread over great nations the worship of the divinities of the gods and filled towns with altars and led to the performance of stated sacred rites, rites now in fashion on solemn occasions and in solemn places, from which even now is implanted in mortals a shuddering awe which raises new temples of the gods over the whole earth and prompts men to crowd them on festive days, all this it is not so difficult to explain in words. Even then in sooth the races of mortal men would see in waking mind glorious forms, would see them in sleep of yet more marvellous size of body. To these then they would attribute sense, because they seemed to move their limbs and to utter lofty words suitable to their glorious aspect and surpassing powers. And they would give them life everlasting, because their face would ever appear before them and their form abide; yes and yet without all this, because they would not believe that beings possessed of such powers could lightly be overcome by any force. And they would believe them to be preeminent in bliss, because none of them was ever troubled with the fear of death, and because at the same time in sleep they would see them perform many miracles, yet feel on their part no fatigue from the effort.

Again they would see the system of heaven and the different seasons of the years come round in regular succession, and could not find out by what causes this was done; therefore they would seek a refuge in handing over all things to the gods and supposing all things to be guided by their nod. And they placed in heaven the abodes and realms of the gods, because night and moon are seen to roll through heaven, moon day and night and night's austere constellations and night-wandering meteors of the sky and flying bodies of flame, clouds sun rains snow winds lightnings hail and rapid rumblings and loud threatful thunderclaps.

O hapless race of men, when that they charged the gods with such acts and coupled with them bitter wrath! what groanings did they then beget for themselves, what wounds for us, what tears for our children's children! No act is it of piety to be often seen with veiled head to turn to a stone and approach every altar and fall prostrate on the ground and spread out the palms before the statues of the gods and sprinkle the altars with much blood of beasts and link vow on to vow, but rather to be able to look on all things with a mind at peace. For when we turn our gaze on the heavenly quarters of the great upper world and ether fast above the glittering stars, and direct our thoughts to the courses of the sun and moon, then into our breasts burdened with other ills that fear as well begins to exalt its reawakened head, the fear that we may haply find the power of the gods to be unlimited, able to wheel the bright stars in their varied motion; for lack of power to solve the question troubles the mind with doubts, whether there was ever a birth-time of the world, and whether likewise there is to be any end; how far the walls of the world can endure this strain of restless motion; or whether gifted by the grace of the gods with an everlasting existence they may glide on through a never-ending tract of time and defy the strong powers of immeasurable ages. Again who is there whose mind does not shrink into itself with fear of the gods, whose limbs do not cower in terror, when the parched earth rocks with the appalling thunderstroke and rattlings run through the great heaven? Do not peoples and nations quake, and proud monarchs shrink into themselves smitten with fear of the gods, lest for any foul transgression or overweening word the heavy time of reckoning has arrived at its fulness? When too the utmost fury of the head-

strong wind passes over the sea and sweeps over its waters the commander of a fleet together with his mighty legions and elephants, does he not draw near with vows to seek the mercy of the gods and ask in prayer with fear and trembling a lull in the winds and propitious gales; but all in vain, since often caught up in the furious hurricane he is borne none the less to the shoals of death? so constantly does some hidden power trample on human grandeur and is seen to tread under its heel and make sport for itself of the renowned rods and cruel axes. Again when the whole earth rocks under their feet and towns tumble with the shock or doubtfully threaten to fall, what wonder that mortal men abase themselves and make over to the gods in things here on earth high prerogatives and marvellous powers, sufficient to govern all things?

To proceed, copper and gold and iron were discovered and at the same time weighty silver and the substance of lead, when fire with its heat had burnt up vast forests on the great hills, either by a discharge of heaven's lightning, or else because men waging with one another a forest-war had carried fire among the enemy in order to strike terror, or because drawn on by the goodness of the soil they would wish to clear rich fields and bring the country into pasture, or else to destroy wild beasts and enrich themselves with the booty; for hunting with the pitfall and with fire came into use before the practice of enclosing the lawn with toils and stirring it with dogs. Whatever the fact is, from whatever cause the heat of flame had swallowed up the forests with a frightful crackling from their very roots and had thoroughly baked the earth with fire, there would run from the boiling veins and collect into the hollows of the ground a stream of silver and gold, as well as of copper and lead. And when they saw these afterwards cool into lumps and glitter on the earth with a brilliant gleam, they would lift them up attracted by the bright and polished lustre, and they would see them to be moulded in a shape the same as the outline of the cavities in which each lay. Then it would strike them that these might be melted by heat and cast in any form or shape soever, and might by hammering out be brought to tapering points of any degree of sharpness and fineness, so as to furnish them with tools and enable them to cut the forests and hew timber and plane smooth the planks, and also to drill and

pierce and bore. And they would set about these works just as much with silver and gold at first as with the overpowering strength of stout copper, but in vain, since their force would fail and give way and not be able like copper to stand the severe strain. At that time copper was in higher esteem and gold would lie neglected on account of its uselessness, with its dull blunted edge: now copper lies neglected, gold has mounted up to the highest place of honour. Thus time as it goes round changes the seasons of things. That which was in esteem, falls at length into utter disrepute; and then another thing mounts up and issues out of its degraded state and every day is more and more coveted and blossoms forth high in honour when discovered and is in marvellous repute with men.

And now, Memmius, it is easy for you to find out by yourself in what way the nature of iron was discovered. Arms of old were hands nails and teeth and stones and boughs broken off from the forests, and flame and fire, as soon as they had become known. Afterwards the force of iron and copper was discovered; and the use of copper was known before that of iron, as its nature is easier to work and it is found in greater quantity. With copper they would labour the soil of the earth, with copper stir up the billows of war and deal about wide-gaping wounds and seize cattle and lands; for every thing defenceless and unarmed would readily yield to them with arms in hand. Then by slow steps the sword of iron gained ground and the make of the copper sickle became a byword; and with iron they began to plough through the earth's soil, and the struggles of wavering war were rendered equal. And the custom of mounting in arms on the back of a horse and guiding him with reins and shewing prowess with the right hand is older than that of tempting the risks of war in a two-horsed chariot; and yoking a pair of horses is older than yoking four or mounting in arms scythed chariots. Next the Poeni taught the lucan kine with towered body, hideous of aspect, with snake-like hand, to endure the wounds of war and to disorder the mighty ranks of Mars. Thus sad discord begat one thing after another, to affright nations of men under arms, and every day made some addition to the terrors of war.

They made trial of bulls too in the service of war and es-

sayed to send savage boars against the enemy. And some sent before them valorous lions with armed trainers and courageous keepers to guide them and to hold them in chains; but in vain, since heated with promiscuous slaughter they would disorder in their rage the troops without distinction, shaking all about the frightful crests upon their heads; and the horsemen were not able to calm the breasts of the horses scared by the roaring and turn them with the bridle upon the enemy. The lionesses with a spring would throw their enraged bodies on all sides and would attack in the face those who met them, and others off their guard they would tear down from behind and twining round them would bring them to the ground overpowered by the wound, fastening on them with firm bite and with hooked claws. The bulls would toss their own friends and trample them under foot, and gore with their horns the flanks and bellies of the horses underneath and turn up the earth with threatening front. The boars too would rend their friends with powerful tusks, in their rage dying with their blood the weapons broken in them, ay dying with their blood the weapons broken in their own bodies; and would put to promiscuous rout horse and foot; for the tame beasts would try to avoid by shying to the side the cruel push of the tusk, or would rear up and paw the winds, all in vain, since you might see them tumble down with their tendons severed and straw the ground in their heavy fall. Those whom they believed before to have been sufficiently broken in at home, they would see lash themselves into fury in the heat of action from wounds and shouting, flight panic and uproar; and they could not rally any portion of them; for all the different kinds of wild beasts would fly all abroad; just as now the lucan kine when cruelly mangled by the steel fly often all abroad, after inflicting on their friends many cruel sufferings. But men chose thus to act not so much in any hope of victory, as from a wish to give the enemy something to rue at the cost of their own lives, when they mistrusted their numbers and were in want of arms.

A garment tied on the body was in use before a dress of woven stuff. Woven stuff comes after iron, because iron is needed for weaving a web; and in no other way can such finely polished things be made, as heddles and spindles, shuttles and ringing yarn-beams. And nature impelled men to work up the wool

before womankind: for the male sex in general far excels the other in skill and is much more ingenious: until the rugged countrymen so upbraided them with it, that they were glad to give it over into the hands of the women and take their share in supporting hard toil, and in such hard work hardened body and hands.

But nature, parent of things, was herself the first model of sowing, and first gave rise to grafting, since berries and acorns, dropping from the trees, would put forth in due season swarms of young shoots underneath; and hence also came the fashion of inserting grafts in their stocks and planting in the ground young saplings over the fields. Next they would try another and yet another kind of tillage for their loved piece of land and would see the earth better the wild fruits through genial fostering and kindly cultivation. And they would force the forests to recede every day higher and higher up the hill-side and yield the ground below to tilth, in order to have, on the uplands and plains, meadows, tanks, runnels, cornfields, and glad vineyards, and allow a grey-green strip of olives to run between and mark the divisions, spreading itself over hillocks and valleys and plains; just as you now see richly dight with varied beauty all the ground which they lay out and plant with rows of sweet fruit-trees and enclose all round with plantations of other goodly trees.

But imitating with the mouth the clear notes of birds was in use long before men were able to sing in tune smooth-running verses and give pleasure to the ear. And the whistlings of the zephyr through the hollows of reeds first taught peasants to blow into hollow stalks. Then step by step they learned sweet plaintive ditties, which the pipe pours forth pressed by the fingers of the players, heard through pathless woods and forests and lawns, through the unfrequented haunts of shepherds and abodes of unearthly calm. These things would soothe and gratify their minds when sated with food; for then all things of this kind are welcome. Often therefore stretched in groups on the soft grass beside a stream of water under the boughs of a high tree at no great cost they would pleasantly refresh their bodies, above all when the weather smiled and the seasons of the year painted the green grass with flowers. Then went round the jest, the tale, the peals of merry laughter; for the peasant muse was then in its glory; then frolick mirth would prompt to entwine

head and shoulders with garlands plaited with flowers and leaves, and to advance in the dance out of step and move the limbs clumsily and with clumsy foot beat mother earth; which would occasion smiles and peals of merry laughter, because all these things then from their greater novelty and strangeness were in high repute. And the wakeful found a solace for want of sleep in this, in drawing out a variety of notes and going through tunes and running over the reeds with curving lip; whence even at the present day watchmen observe these traditions and have lately learned to keep the proper tune; and yet for all this receive not a jot more of enjoyment, than erst the rugged race of sons of earth received. For that which we have in our hands, if we have known before nothing pleasanter, pleases above all and is thought to be the best; and as a rule the later discovery of something better spoils the taste for the former things and changes the feelings in regard to all that has gone before. Thus began distaste for the acorn, thus were abandoned those sleeping-places strawn with grass and enriched with leaves. The dress too of wild beasts' skin fell into neglect; though I can fancy that in those days it was found to arouse such jealousy that he who first wore it met his death by an ambuscade, and after all it was torn in pieces among them and drenched in blood was utterly destroyed and could not be turned to any use. In those times therefore skins, now gold and purple plague men's lives with cares and wear them out with war. And in this methinks the greater blame rests with us; for cold would torture the naked sons of earth without their skins; but us it harms not in the least to do without a robe of purple, spangled with gold and large figures, if only we have a dress of the people to protect us. Mankind therefore ever toils vainly and to no purpose and wastes life in groundless cares, because sure enough they have not learnt what is the true end of getting and up to what point genuine pleasure goes on increasing: this by slow degrees has carried life out into the deep sea and stirred up from their lowest depths the mighty billows of war.

But those watchful guardians sun and moon traversing with their light all round the great revolving sphere of heaven taught men that the seasons of the year came round and that the system was carried on after a fixed plan and fixed order.

Already they would pass their life fenced about with strong towers, and the land, portioned out and marked off by boundaries, be tilled; the sea would be filled with ships scudding under sail; towns have auxiliaries and allies as stipulated by treaty, when poets began to consign the deeds of men to verse; and letters had not been invented long before. For this reason our age cannot look back to what has gone before, save where reason points out any traces.

Ships and tillage, walls laws arms roads dress and all such like things, all the prizes, all the elegancies too of life without exception, poems pictures and the chiselling of fine-wrought statues, all these things practice together with the acquired knowledge of the untiring mind taught men by slow degrees as they advanced on the way step by step. Thus time by degrees brings each several thing forth before men's eyes and reason raises it up into the borders of light; for things must be brought to light one after the other and in due order in the different arts, until these have reached their highest point of development.

LUCRETIUS

ON THE NATURE OF THINGS

BOOK SIXTH

In days of yore Athens of famous name first imparted corn-producing crops to suffering mankind, and modelled life anew and passed laws; and first too bestowed sweet solaces of existence, when she gave birth to a man who shewed himself gifted with such a genius and poured forth all knowledge of old from his truth-telling mouth; whose glory, even now that he is dead, on account of his godlike discoveries confirmed by length of time is spread abroad among men and reaches high as heaven. For when he saw that the things which their needs imperiously demand for subsistence, had all without exception been already provided for men, and that life, so far as was possible, was placed on a sure footing, that men were great in affluence of riches and honours and glory and swelled with pride in the high reputation of their children, and yet that none of them at home for all that had a heart the less disquieted, and that this heart in despite of the understanding plagued life without any respite and was constrained to rave with distressful complainings, he then perceived that the vessel itself did cause the corruption and that by its corruption all the things that came into it and were gathered from abroad, however salutary were spoilt within it; partly because he saw it to be leaky and full of holes so that it could never by any means be filled full; partly because he perceived that it befouled so to say with a nauseous flavour everything within it, which it had taken in. He therefore cleansed men's breasts with truth-telling precepts and fixed a limit to lust and fear and explained what was the chief good which we all strive to reach, and pointed out the road along which by a short cross-

track we might arrive at it in a straightforward course; he shewed too what evils existed in mortal affairs throughout, rising up and manifoldly flying about by a natural—call it chance or force, because nature had so brought it about; and from what gates you must sally out duly to encounter each; and he proved that mankind mostly without cause arouse in their breast the melancholy tumbling billows of cares. For even as children are flurried and dread all things in the thick darkness, thus we in the daylight fear at times things not a whit more to be dreaded than what children shudder at in the dark and fancy sure to be. This terror therefore and darkness of mind must be dispelled not by the rays of the sun and glittering shafts of day, but by the aspect and law of nature. Wherefore the more readily I will go on in my verses to complete the web of my design.

And since I have shewn that the quarters of ether are mortal and that heaven is formed of a body that had a birth, and since of all the things which go on and must go on in it, I have unravelled most, hear further what remains to be told; since once for all [I have willed] to mount the illustrious chariot [of the muses, and ascending to heaven to explain the true law of winds and storms, which men foolishly lay to the charge of the gods, telling how, when they are angry, they raise fierce tempests; and, when there is a lull in the fury] of the winds, how that anger is appeased, how the omens which have been are again changed, when their fury has thus been appeased: [I have willed at the same time] to explain all the other things which mortals observe to go on upon earth and in heaven, when often they are in anxious suspense of mind, and which abase their souls with fear of the gods and weigh and press them down to earth, because ignorance of the causes constrains them to submit things to the empire of the gods and to make over to them the kingdom. For they who have been rightly taught that the gods lead a life without care, if nevertheless they wonder on what plan all things can be carried on, above all in regard to those things which are seen overhead in the ethereal borders, are borne back again into their old religious scruples and take unto themselves hard taskmasters, whom they poor wretches believe to be almighty, not knowing what can, what cannot be, in short on what principle each thing has its powers defined, its deep-set boundary mark; and therefore they

are led all the farther astray by blind reason. Now unless you drive from your mind with loathing all these things, and banish far from you all belief in things degrading to the gods and inconsistent with their peace, then often will the holy deities of the gods, having their majesty lessened by you, do you hurt; not that the supreme power of the gods can be so outraged, that in their wrath they shall resolve to exact sharp vengeance, but because you will fancy to yourself that they, though they enjoy quiet and calm peace, do roll great billows of wrath; nor will you approach the sanctuaries of the gods with a calm breast nor will you be able with tranquil peace of mind to take in those idols which are carried from their holy body into the minds of men, as heralds of their divine form. And what kind of life follows after this, may be conceived. But in order that most veracious reason may drive it far away from us, though much has already gone forth from me, much however still remains and has to be embellished in smooth-polished verses; the law and aspect of heaven have to be grasped; storms and bright lightnings, what they do and from what cause they are borne along, all this has to be sung; that you may not mark out the heaven into quarters and be startled and distracted on seeing from which of them the volant fire has come or to which of the two halves it has betaken itself, in what way it has gained an entrance within walled places, and how after lording it with tyrant sway, it has gotten itself out from these. Do thou, deft muse Calliope, solace of men and joy of gods, point out the course before me as I race to the white boundary-line of the final goal, that under thy guidance I may win the crown with signal applause.

In the first place the blue of heaven is shaken with thunder, because the ethereal clouds clash together as they fly aloft when the winds combat from opposite quarters. For no sound ever comes from a cloudless part of heaven, but wheresoever the clouds are gathered in a denser mass, from that part with greater frequency comes a clap with a loud growl. Again clouds cannot be either of so dense a body as stones and timbers, nor again so fine as mists and flying bodies of smoke; for then they must either fall borne down by their dead weight like stones, or like smoke they would be unable to keep together and hold within frozen snows and hail-showers. They also give forth a sound over the

levels of the wide-stretching upper world, just as at times a canvas-awning stretched over large theatres makes a creaking noise, when it tosses about among the poles and beams; sometimes too rent by the boisterous gales it madly howls and closely imitates the rasping noise of pieces of paper: for this kind of noise too you may observe in thunder: you may observe again the sound which is heard when the winds whirl about with their blows and buffet through the air either a hanging cloth or flying bits of paper. For sometimes the clouds cannot meet front to front in direct collision, but must rather move from the flank and so with contrary motions graze leisurely along each other's bodies; whence comes that dry sound which brushes the ears and is long drawn out, until they have made their way out of their confined positions.

In this way also all things appear to quake often from the shock of heavy thunder, and the mighty walls of the farstretching ether seem in an instant to have been riven and to have sprung asunder; when a storm of violent wind has suddenly gathered and worked itself into the clouds and, there shut in, with its whirling eddy ever more and more on all sides forces the cloud to become hollow with a thick surrounding crust of body; afterwards when its force and impetuous onset have split it, then the cloud thus rent gives forth a crash with a frightful hurtling noise. And no wonder, when a small bladder filled with air often emits a hideous sound if suddenly burst.

It can also be explained how the winds, when they blow through the clouds, make noises: we see branching and rough clouds often borne along in many ways; thus, you are to know, when the blasts of the northwest blow through a dense forest, the leaves give forth a rustling and the boughs a crashing. Sometimes too the force of the strong wind in rapid motion rends the cloud, breaking through it by an assault right in front: what a blast of wind can do there, is shewn by facts plain to sense, when here on earth where it is gentler it yet twists out tall trees and tears them up from their deepest roots. There are also waves among the clouds and they give a kind of roar as they break heavily; just as in deep rivers and on the great sea when the surf breaks. Sometimes too when the burning force of thunder has fallen out of one cloud into another, if haply the latter con-

tains much moisture when it has taken the fire into it, it drowns it at once with a loud noise; just so iron glowing hot from the fiery furnaces sometimes hisses, when we have plunged it quickly into cold water. Again if the cloud which receives the fire is drier, it is set on fire in an instant and burns with a loud noise; just as if a flame should range over the laurel-covered hills through a whirlwind and burn them up with its impetuous assault; and there is not anything that burns in the crackling flame with a more startling sound than the Delphic laurel of Phoebus. Then often too much crashing of ice and tumbling in of hail make a noise in the great clouds on high; for when the wind packs them together into a confined space, the mountains of storm-clouds congealed and mixed with hail break up.

It lightens too, when the clouds have struck out by their collision many seeds of fire; just as if a stone were to strike another stone or a piece of iron; for then too light bursts out and fire scatters about bright sparks. But we hear the thunder with our ears after the eyes see the flash of lightning, because things always travel more slowly to the ears than those which excite vision travel to the eyes. This you may perceive from the following instance as well: when you see a man at a distance cutting with a double-edged axe a large tree, you perceive the stroke before the blow carries the sound to the ear: thus we see lightning too before we hear the thunder, which is discharged at the same time as the fire from the same cause, being born indeed from the same collision.

Also in the following manner clouds dye places with winged light and the storm flashes out with a rapid quivering movement. When the wind has made its way into a cloud and whirling about in it has, as I have shewn above, made the cloud hollow with a dense crust, it becomes hot by its own velocity: thus you see all things thoroughly heated and fired by motion; nay a leaden ball in whirling through a long course even melts. When therefore this wind now on fire has rent the black cloud, it scatters abroad at once seeds of fire pressed out by force so to speak, and these produce the throbbing flashes of flame; then follows a sound which strikes on the ears more slowly than the things which travel to our eyes strike on them. This you are to know takes place when the clouds are dense and at the same time

piled up on high one above the other in marvellous accumulation; that you be not led into error, because we see how great their breadth is below, rather than to how great a height they are piled up. Observe, at a time when the winds shall carry clouds like to mountains with a slanting course through the air, or when you shall see them piled on the sides of great mountains one on the top of the other and pressing down from above perfectly at rest, the winds being buried on all sides: you will then be able to observe their great masses and to see caverns as it were built of hanging rocks; and when a storm has gathered and the winds have filled these, they chafe with a loud roaring shut up in the clouds, and bluster in their dens after the fashion of wild beasts: now from this point, now from that the winds send their growlings through the clouds, and seeking a way out whirl about and roll together seeds of fire out of the clouds and then gather many into a mass and make flame rotate in the hollow furnaces within, until they have burst the cloud and shone forth in forked flashes.

From this cause again yon golden colour of clear bright fire flies down with velocity to the earth: the clouds must themselves have very many seeds of fire; for when they are without any moisture, they are mostly of a brilliant flame colour. Moreover they must take in many from the sun's light, so that with good cause they are ruddy and shed forth fires. When therefore the wind has driven thrust squeezed together and collected into one spot these clouds, they press out and shed forth seeds which cause the colours of flame to flash out. It also lightens, when the clouds of heaven are rarefied as well. For when the wind lightly unravels them and breaks them up as they move, those seeds which produce the lightning must fall perforce; and then it lightens without a hideous startling noise and without any uproar.

Well, to proceed, what kind of nature thunderbolts possess, is shewn by their strokes and the traces of their heat which have burnt themselves into things and the marks which exhale the noxious vapours of sulphur: all these are signs of fire, not of wind or rain. Again they often set on fire even the roofs of houses and with swift flame rule resistless within the house. This fire subtle above all fires nature, you are to know, forms of minute and lightly moving bodies, and it is such as nothing whatever can withstand.

The mighty thunderbolt passes through the walls of houses, like a shout and voices, passes through stones, through brass, and in a moment of time melts brass and gold; and causes wine too in an instant to disappear, while the vessels are untouched, because sure enough its heat on reaching it readily loosens and rarefies all the earthen material of the vessel on every side and forcing a way within lightly separates and disperses the first-beginnings of the wine. This the sun's heat would be unable to accomplish in an age, though beating on it incessantly with its quivering heat: so much more nimble and overpowering is this other force.

And now in what way these are begotten and are formed with a force so resistless as to be able with their stroke to burst asunder towers, throw down houses, wrench away beams and rafters, and cast down and burn up the monuments of men, to strike men dead, prostrate cattle far and near, by what force they can do all this and the like, I will make clear and will not longer detain you with mere professions.

Thunderbolts we must suppose to be begotten out of dense clouds piled up high; for they are never sent forth at all when the sky is clear or when the clouds are of a slight density. That this is so beyond all question is proved by facts evident to sense: clouds at such times form so dense a mass over the whole sky that we might imagine all its darkness had abandoned Acheron throughout and filled up the great vaults of heaven: in such numbers, gathering up out of the frightful night of storm-clouds, do faces of black horror hang over us on high; what time the storm begins to forge its thunderbolts. Very often again a black storm-cloud too out at sea, like a stream of pitch sent down from heaven, falls in such wise upon the waters heavily charged with darkness afar off and draws down a black tempest big with lightnings and storms, itself so fraught above all the rest with fires and winds, that even on land men shudder and seek shelter. Thus then we must suppose that the storm above our head reaches high up; for the clouds would never bury the earth in such thick darkness, unless they were built up high heap upon heap, the sunlight totally disappearing; nor could the clouds when they descend drown it with so great a rain, as to make rivers overflow and put fields under water, if they were not piled high up in the sky. In this case then all things are filled with winds and fire; therefore thunderings and lightnings go on all about. For I have shewn above that hollow clouds have very many seeds of heat, and they must also take many in from the sun's rays and their heat. On this account when the same wind which happens to collect them into any one place, has forced out many seeds of heat and has mixed itself up with that fire, then the eddy of wind forces a way in and whirls about in the straitened room and points the thunderbolt in the fiery furnaces within; for it is kindled in two ways at once: it is heated by its own velocity and from the contact of fire. After that when the force of the wind has been thoroughly heated and the impetuous power of the fire has entered in, then the thunderbolt fully forged as it were suddenly rends the cloud, and the heat put in motion is carried on traversing all places with flashing lights. Close upon it falls so heavy a clap that it seems to crush down from above the quarters of heaven which have all at once sprung asunder. Then a trembling violently seizes the earth and rumblings run through high heaven; for the whole body of the storm then without exception quakes with the shock and loud roarings are aroused. After this shock follows so heavy and copious a rain that the whole ether seems to be turning into rain and then to be tumbling down and returning to a deluge: so great a flood of it is discharged by the bursting of the cloud and the storm of wind, when the sound flies forth from the burning stroke. At times too the force of the wind set in motion from without falls on a cloud hot with a fully forged thunderbolt; and when it has burst it, forthwith there falls down yon fiery eddying whirl which in our native speech we call a thunderbolt. The same takes place on every other side towards which the force in question has borne down. Sometimes too the power of the wind though discharged without fire, yet catches fire in the course of its long travel, and while it is passing on, it loses on the way some large bodies which cannot like the rest get through the air; and gathers together out of the air itself and carries along with it other bodies of very small size which mix with it and produce fire by their flight; very much in the same way as a leaden ball becomes hot during its course, when it loses many bodies of cold and has taken up fire in the air. Sometimes too the force of the blow itself strikes out fire, when the force of wind discharged in a cold state without fire has struck, because sure enough, when it has smitten with a powerful

stroke, the elements of heat are able to stream together out of the wind itself and at the same time out of the thing which then encounters the stroke. Thus, when we strike a stone with iron, fire flies out; and none the less, because the force of the iron is cold, do its seeds of fiery brightness meet together upon the stroke. Therefore in the same way too a thing ought to be set on fire by the thunderbolt, if it has happened to be in a state suited to receive and susceptible of the flames. At the same time the might of the wind cannot lightly be thought to be absolutely and decidedly cold, seeing that it is discharged with such force from above; but if it is not already set on fire during its course, it yet arrives in a warm state with heat mixed up in it.

But the velocity of thunderbolts is great and their stroke powerful, and they run through their course with a rapid descent, because their force when set in motion first in all cases collects itself in the clouds and gathers itself up for a great effort at starting; then when the cloud is no longer able to hold the increased moving power, their force is pressed out and therefore flies with a marvellous moving power, like to that with which missiles are carried when discharged from powerful engines. Then too the thunderbolt consists of small and smooth elements, and such a nature it is not easy for anything to withstand; for it flies between and passes in through the porous passages; therefore it is not checked and delayed by many collisions, and for this reason it glides and flies on with a swift moving power. Next, all weights without exception naturally pressing downward, when to this a blow is added, the velocity is doubled and yon moving power becomes so intense that the thunderbolt dashes aside more impetuously and swiftly whatever gets in its way and tries to hinder it, and pursues its journey. Then too as it advances with a long-continued moving power, it must again and again receive new velocity which ever increases as it goes on and augments its powerful might and gives vigour to its stroke; for it forces all the seeds of the thunder to be borne right onward to one spot so to speak, throwing them all together, as on they roll, into that single line. Perhaps too as it goes on it attracts certain bodies out of the air itself, and these by their blows kindle apace its velocity. It passes too through things without injuring them, and leaves many things quite whole after it has gone through, because the

clear bright fire flies through by the pores. And it breaks to pieces many things, when the first bodies of the thunderbolt have fallen exactly on the first bodies of these things, at the points where they are intertwined and held together. Again it easily melts brass and fuses gold in an instant, because its force is formed of bodies minutely small and of smooth elements, which easily make their way in and when they are in, in a moment break up all the knots and untie the bonds of union. And more especially in autumn the mansion of heaven studded with glittering stars and the whole earth are shaken on all sides, and also when the flowery season of spring discloses itself. For during the cold fires are wanting and winds fail during the heat, and the clouds then are not of so dense a body. When therefore the seasons of heaven are between the two extremes, the different causes of thunder and lightning all combine; for the very cross-current of the year mixes up cold and heat, both of which a cloud needs for forging thunderbolts; so that there is great discord in things and the air raving with fires and winds heaves in mighty disorder. The first part of heat and the last of cold is the spring-time; therefore unlike things must battle with one another and be turbulent when mixed together. And when the last heat mixed with the first cold rolls on its course, a time which goes by the name of autumn, then too fierce winters are in conflict with summers. Therefore these seasons are to be called the cross-seas of the year; and it is not wonderful that in that season thunderbolts are most frequent and troublous storms are stirred up in heaven; since both sides then engage in the troublous medley of dubious war, the one armed with flames, the other with winds and water commingled.

This is the way to see into the true nature of the thunderbolt and to understand by what force it produces each effect, and not the turning over the scrolls of Tyrrhene charms and vainly searching for tokens of the hidden will of the gods, in order to know from what quarter the volant fire has come or to which of the two halves it has betaken itself, in what way it has gained an entrance within walled places, and how after lording it with tyrant sway it has gotten itself out from these; also what harm the thunderstroke from heaven can do. But if Jupiter and other gods shake with an appalling crash the glittering quarters of heaven, and hurl their fire whither each is so minded, why strike they not those

whoever they be who have recked not of committing some abominable sin and make them give forth the flames of lightning from breast pierced through and through, a sharp lesson to men? and why rather is he whose conscience is burdened with no foul offence, innocent though he be, wrapped and enveloped in the flames, in a moment caught up by the whirlwind and fire of heaven? Why too aim they at solitary spots and spend their labour in vain? or are they then practising their arms and strengthening their sinews? and why do they suffer the father's bolt to be blunted on the earth? why does he allow it himself, and not spare it for his enemies? Why again, when heaven is unclouded on all sides, does Jupiter never hurl a bolt on the earth or send abroad his claps? or does he, so soon as clouds have spread under, then go down in person into them, that from them he may aim the strokes of his bolt near at hand? Ay and for what reason does he hurl into the sea? of what has he to impeach its waters and liquid mass and floating fields? Again if he wills us to avoid the thunderstroke, why fears he to let us see it discharged? or if he wills to crush us off our guard with his fire, why thunders he from that side, to enable us to shun it? why stirs he up beforehand darkness and roarings and rumblings? And how can you believe that he hurls at many points at the same time? or would you venture to maintain that it never has happened that more than one stroke was made at one time? Nay often and often it has happened and must happen that, even as it rains and showers fall in many different quarters, so many thunderings go on at one time. Once more why does he dash down the holy sanctuaries of the gods and his own gorgeous seats with the destroying thunderbolt, and break the finewrought idols of the gods, and spoil his own images of their glory by an overbearing wound? and why does he mostly aim at lofty spots, and why do we see most traces of his fire on the mountain tops?

To proceed, it is easy from these facts to understand in what way those things, which the Greeks from their nature have named presteres, come down from above into the sea. For sometimes a pillar so to speak is let down from heaven and descends into the sea, and round about it the surges boil, stirred up by heavy blasts of winds; and all ships caught in that turmoil are dashed about and brought into extreme danger. This takes place when at times

the force of the wind put in motion cannot burst the cloud which it essays to burst, but weighs it down, so that it is like a pillar let down from heaven into the sea, yet gradually, just as if a thing were thrust down from above and stretched out to the level of the waters by the fist and push of the arm; and when the force of the wind has rent this cloud, it bursts out from it into the sea and occasions a marvellous boiling in the waters; for the whirling eddy descends and brings down together with it yon cloud of limber body; and as soon as it has forced it down full-charged as it is to the levels of the sea, the eddy in a moment plunges itself entire into the water, and stirs up the whole sea with a prodigious noise and forces it to boil. Sometimes too the eddy of wind wraps itself up in clouds and gathers out of the air seeds of cloud and imitates in a sort the prester let down from heaven. When this prester has let itself down to the land and has burst, it belches forth a whirlwind and storm of enormous violence; but as it seldom takes place at all and as mountains cannot but obstruct it on land, it is seen more frequently on the sea with its wide prospect and unobstructed horizon.

Clouds are formed, when in this upper space of heaven many bodies flying about have in some one instant met together, of a rougher sort, such as are able, though they have got the very slightest holds of each other, to catch together and be held in union. These bodies first cause small clouds to form; and these next catch together and collect into masses and increase by joining with each other and are carried on by the winds continually until a fierce storm has gathered. The nearer too the tops of a mountain in each case are to heaven, the more constantly at this elevation they smoke with the thick darkness of a swarthy cloud, because, as soon as clouds form, before the eyes can see them, thin as they are, the winds carry and bring them together to the highest summits of a mountain; and then at last when they have gathered in a greater mass, being now dense they are able to make themselves visible and at the same time they are seen to rise up from the very top of the mountain into the ether: the very fact of the case and our sensations, when we climb high mountains, prove that the regions which stretch up on high are windy. Again clothes hung up on the shore, when they drink in the clinging moisture, prove that nature takes up many bodies over

the whole sea as well. This makes it still more plain that many bodies may likewise rise up out of the salt heaving sea to add to the bulk of clouds; for the two liquids are near akin in their nature. Again we see mists and steam rise out of all rivers and at the same time from the earth as well; and they forced out like a breath from these parts are then carried upwards and overcast heaven with their darkness and make up clouds on high as they gradually come together; for the heat of starry ether at the same time presses down too on them and by condensing as it were weaves a web of clouds below the blue. Sometimes there come here into heaven from without those bodies which form clouds and the flying storm-rack; for I have shewn that their number passes numbering and that the sum of the deep is infinite; and I have proved with what velocity bodies fly and how in a moment of time they are wont to pass through space unspeakable. It is not therefore strange that a tempest and darkness often in a short time cover over with such great mountains of clouds seas and lands, as they hang down upon them overhead, since on all sides through all the cavities of ether and as it were through the vents of the great world around the power of going out and coming in is accorded to the elements.

Now mark and I will explain in what way the rainy moisture is formed in the clouds above and then is sent down and falls to the earth in the shape of rain. And first I will prove that many seeds of water rise up together with the clouds themselves out of all things and that both the clouds and the water which is in the clouds thus increase together; just as our body increases together with the blood, as well as the sweat and all the moisture which is in the frame. The clouds likewise imbibe much sea-water as well, like hanging fleeces of wool, when the winds carry them over the great sea. In like manner moisture is taken up out of all rivers into the clouds; and when the seeds of waters full many in number in many ways have met in them, augmented from all sides, then the close-packed clouds endeavour to discharge their moisture from two causes: the force of the wind drives them together, and likewise the very abundance of the rain-clouds, when a greater mass than usual has been brought together, pushes down, presses from above and forces the rain to stream out. Again when the clouds are also rarefied by the winds, or are dispersed, being smitten at the same time by the heat of the sun, they discharge a rainy moisture and trickle down, just as wax over a hot fire melts away and turns fast into liquid. But a violent rain follows, when the clouds are violently pressed upon by both causes, by their own accumulated weight and by the impetuous assault of the wind. And rains are wont to hold out and to last long, when many seeds of waters are stirred to action, and clouds upon clouds and rack upon rack welling forth from all quarters round about are borne along, and when the reeking earth steams moisture back again from its whole surface. When in such a case the sun has shone with his rays amid the murky tempest right opposite the dripping rain-clouds, then the colour of the rainbow shews itself among the black clouds.

As to the other things which grow by themselves and are formed by themselves, as well as the things which are formed within the clouds, all, without exception all, snow winds hail and cold hoarfrosts and the great force of ice, the great congealing power of waters, and the stop which everywhere curbs running rivers, it is yet most easy to find out and apprehend in mind how all these things take place and in what way they are formed, when you have fully understood the properties assigned to elements.

Now mark and learn what the law of earthquakes is. And first of all take for granted that the earth below us as well as above is filled in all parts with windy caverns and bears within its bosom many lakes and many chasms, cliffs and craggy rocks; and you must suppose that many rivers hidden beneath the crust of the earth roll on with violence waves and submerged stones; for the very nature of the case requires it to be throughout like to itself. With such things then attached and placed below, the earth quakes above from the shock of great falling masses, when underneath time has undermined vast caverns; whole mountains indeed fall in, and in an instant from the mighty shock tremblings spread themselves far and wide from that centre. And with good cause, since buildings beside a road tremble throughout when shaken by a waggon of not such very great weight; and they rock no less, where any sharp pebble on the road jolts up the iron tires of the wheels on both sides. Sometimes too, when an enormous mass of soil through age rolls down from the land into great and extensive pools of water, the earth rocks and sways

with the undulation of the water; just as a vessel at times cannot rest, until the liquid within has ceased to sway about in unsteady undulations.

Again when the wind gathering itself together in the hollow places underground bears down on one point and pushing on presses with great violence the deep caverns, the earth leans over on the side to which the headlong violence of the wind presses. Then all buildings which are above ground, and ever the more, the more they tower up towards heaven, lean over and bulge out yielding in the same direction, and the timbers wrenched from their supports hang over ready to give way. And yet men shrink from believing that a time of destruction and ruin awaits the nature of the great world, though they see so great a mass of earth hang ready to fall! And if the winds did not abate their blowing, no force could rein things in or hold them up on their road to destruction. As it is, because by turns they do abate and then increase in violence, and so to speak rally and return to the charge, and then are defeated and retire, for this reason the earth oftener threatens to fall than really falls: it leans over and then sways back again, and after tumbling forward recovers in equal poise its fixed position. For this reason the whole house rocks, the top more than the middle, the middle than the bottom, the bottom in a very very slight degree.

The same great quaking likewise arises from this cause, when on a sudden the wind and some enormous force of air gathering either from without or within the earth have flung themselves into the hollows of the earth, and there chafe at first with much uproar among the great caverns and are carried on with a whirling motion, and when their force afterwards stirred and lashed into fury bursts abroad and at the same moment cleaves the deep earth and opens up a great yawning chasm. This fell out in Syrian Sidon and took place at Aegium in the Peloponnese, two towns which an outbreak of wind of this sort and the ensuing earthquake threw down. And many walled places besides fell down by great commotions on land and many towns sank down engulphed in the sea together with their burghers. And if they do not break out, still the impetuous fury of the air and the fierce violence of the wind spread over the numerous passages of the earth like a shivering-fit and thereby cause a trembling; just as cold when it has pierced into our frames to the very marrow, sets them a-shivering in spite of themselves, forcing them to shake and move. Men are therefore disturbed by a twofold terror throughout their cities: they fear the roofs above their heads, they dread lest the nature of the earth in a moment break up her caverns underneath, and rent asunder display her own wide-gaping maw and wildly tumbled together seek to fill it up with her own ruins. Let them then fancy as much as they please that heaven and earth shall be incorruptible and consigned to an everlasting exemption from decay; and yet sometimes the very present force of danger applies on some side or other this goad of fear among others, that the earth shall in an instant be withdrawn from under their feet and carried down into the pit, and that the sum of things shall utterly give way and follow after and a jumbled wreck of world ensue.

First of all they wonder that nature does not increase the bulk of the sea, when there is so great a flow of water into it, when all rivers from all quarters fall into it. Add to these passing rains and flying storms, which bespatter every sea and moisten every land; add its own springs; yet all these compared with the sum of the sea will be like an addition of bulk hardly amounting to a single drop; it is therefore the less wonderful that the great sea does not increase. Again the sun absorbs a great deal with his heat: we see him with his burning rays thoroughly dry clothes dripping with wet: but we know seas to be many in number and to stretch over a wide surface. Therefore however small the portion of moisture which the sun draws off the surface from any one spot, it will yet in so vast an expanse take largely from its waters. Then again the winds too may withdraw a great deal of moisture as they sweep over the surface, since we very often see the roads dried by the winds in a single night and the soft mud form into hard crusts. Again I have shewn that the clouds take off much moisture too imbibed from the great surface of the sea and scatter it about over the whole earth, when it rains on land and the winds carry on the clouds. Lastly since the earth is of a porous body and is in contact with the sea, girding its shores all round, just as water comes from the earth into the sea, in the same way it must ooze into the land out of the salt sea; for the salt is strained off and the matter of liquid streams back

again to the source and all flows together to the river-heads, and then passes anew over the lands in a fresh current, where a channel once scooped out has carried down the waters with liquid foot.

And now I will explain why it is that fires breathe forth at times through the gorges of mount Aetna with such hurricane-like fury; for with a destroying force of no ordinary kind the flame-storm gathered itself up and lording it over the lands of the Sicilians drew on itself the gaze of neighbouring nations, when seeing all the quarters of heaven smoke and sparkle men were filled in heart with awe-struck apprehension, not knowing what strange change nature was travailing to work.

In these matters you must look far and deep and make a wide survey in all directions, in order to bear in mind that the sum of things is unfathomable and to perceive how very small, how inconceivably minute a fraction of the whole sum one heaven is, not so large a fraction of it as one man is of the whole earth. If you should clearly comprehend, clearly see this point well put, you would cease to wonder at many things. Does any one among us wonder if he has gotten into his frame a fever that has broken out with burning heat, or into his body the pains of any other disease? the foot suddenly swells, sharp pain often seizes the teeth, or else attacks the eyes; the holy fire breaks out and creeping over the body burns whatever part it has seized upon, and spreads over the frame, because sure enough there are seeds of many things, and this earth and heaven bring to us evil enough to allow of a measureless amount of disease springing up. In this way then we must suppose that all things are supplied out of the infinite to the whole heaven and earth in quantity sufficient to allow the earth in a moment to be shaken and stirred, and a rapid hurricane to scour over sea and land, the fire of Aetna to overflow, the heaven to be in flames; for that too is seen and the heavenly quarters are on fire; and rain-storms gather in a heavier mass, when the seeds of water have haply come together for such an end. 'Ay but the stormy rage of the conflagration is too too gigantic.' Yes and so any river you like is greatest to him who has never before seen any greater, and thus a tree and a man seem gigantic, and in the case of all things of all kinds the greatest a man has seen he fancies to be gigantic, though

yet all things with heaven and earth and sea included are nothing to the whole sum of the universal sum.

And now at last I will explain in what ways yon flame roused to fury in a moment blazes forth from the huge furnaces of Aetna. And first the nature of the whole mountain is hollow underneath, underpropped throughout with caverns of basalt rocks. Furthermore in all caves are wind and air; for wind is produced, when the air has been stirred and put in motion. When this air has been thoroughly heated and raging about has imparted its heat to all the rocks round, wherever it comes in contact with them, and to the earth, and has struck out from them fire burning with swift flames, it rises up and then forces itself out on high straight through the gorges; and so carries its heat far and scatters far its ashes and rolls on smoke of a thick pitchy blackness and flings out at the same time stones of prodigious weight; leaving no doubt that this is the stormy force of air. Again the sea to a great extent breaks its waves and sucks back its surf at the roots of that mountain. Caverns reach from this sea as far as the deep gorges of the mountain below. Through these you must admit [that air mixed up with water passes; and] the nature of the case compels [this air to enter in from that] open sea and pass right within and then go out in blasts and so lift up flame and throw out stones and raise clouds of sand; for on the summit are craters, as they name them in their own language; what we call gorges and mouths.

There are things too not a few for which it is not sufficient to assign one cause; you must give several, one of which at the same time is the real cause. For instance should you see the lifeless body of a man lying at some distance, it would be natural to mention all the different causes of death, in order that the one real cause of that man's death be mentioned among them. Thus you may be able to prove that he has not died by steel or cold or from disease or haply from poison; yet we know that it is something of this kind which has befallen him; and so in many other cases we may make the same remark.

The Nile rises every summer and overflows the plains, that one sole river throughout the whole land of Egypt. It waters Egypt often in the middle of the hot season, either because in summer there are north winds opposite its mouths, which at that

time of year go by the name of etesian winds. Blowing up the river they retard it and driving the waters backwards fill its channel full and force the river to stand still; for beyond a doubt these blasts which start from the icy constellations of the pole are carried right up the stream. That river comes from the south out of the heat-fraught country, rising far up from the central region of day among races of men black in their sun-baked complexion. It is quite possible too that the great accumulation of sand may bar up the mouths against the opposing waves, when the sea stirred up by the winds throws up the sand within the channel; whereby the outlet of the river is rendered less free and the current of the waters at the same time less rapid in its downward flow. It may be also that the rains are more frequent at its source in that season, because the etesian blasts of the north winds drive all the clouds together into those parts at that time. And, you are to know, when they have been driven on to the central region of day and have gathered together, then the clouds jammed close against the high mountains are massed together and violently compressed. Perhaps too it gets its increase high up from the lofty mountains of the Ethiopians, when the all-surveying sun with his thawing rays constrains the white snows to descend into the plains.

Now mark, and I will make clear to you what kind of nature the several Avernian places and lakes possess. First of all, as to the name Avernian by which they are called, it has been given to them from their real nature, because they are noxious to all birds; for when they have arrived in flight just opposite those spots, they forget to row with their wings, they drop their sails and fall with soft neck outstretched headlong to the earth, if so be that the nature of the ground admit of that, or into the water, if so be that a lake of Avernus spreads below. There is such a spot at Cumae, where the mountains are charged with acrid sulphur, and smoke enriched with hot springs. Such a spot there also is within the Athenian walls, on the very summit of the citadel, beside the temple of bountiful Tritonian Pallas; which croaking crows never come near on the wing; no not when the high altars smoke with offerings: so constantly they fly, not before the sharp wrath of Pallas for the sake of yon vigil kept, as the poets of the Greeks have sung, but the nature of the place suffices by its own proper

power.* In Syria too as well a spot, we are told, is found to exist of such a sort that as soon as ever even fourfooted beasts have entered in, its mere natural power forces them to fall down heavily, just as if they were felled in a moment as sacrifices to the manes gods. Now all these things go on by a natural law, and it is quite plain whence spring the causes from which they are produced; that the gate of Orcus be not haply believed to exist in such spots; and next we imagine that the manes gods from beneath do haply draw souls down from them to the borders of Acheron; as wing-footed stags are supposed often by their scent to draw out from their holes the savage serpent-tribes. How widely opposed to true reason this is, now learn; for now I essay to tell of the real fact.

First of all I say, as I have often said before, that in the earth are elements of things of every kind: many, which serve for food, helpful to life; and many whose property it is to cause diseases and hasten death. And we have shewn before that one thing is more adapted to one, another thing to another living creature for the purposes of life, because of their natures and their textures and their primary elements being all unlike the one to the other. Many which are noxious pass through the ears, many make their way too through the nostrils, dangerous and harsh when they come in contact; and not a few are to be shunned by the touch, and not a few to be avoided by the sight, and others are nauseous in taste.

Again you may see how many things are for man of a virulently noxious sensation and are nauseous and oppressive; to certain trees for instance has been given so very oppressive a shade that they often cause headaches when a man has lain down under them extended on the grass. There is a tree too on the great hills of Helicon which has the property of killing a man by the noisome scent of its flower. All these things you are to know rise up out of the earth, because it contains many seeds of many things in many ways mixed up together and gives them out in a state of separation. Again when a newly extinguished night-light encounters the nostrils with its acrid stench, it sends to sleep then and there a man who from disease is subject to falling down and foaming at the mouth. A woman is put to sleep by oppressive castor and falls back in her seat, and her gay work drops out of

her soft hands, if she has smelt it at the time when she has her monthly discharges. And many things besides relax through all the frame the fainting limbs and shake the soul in its seats within. Then too if you linger long in the hot baths when you are somewhat full and do bathe, how liable you are to tumble down in a fit while seated in the midst of the hot water! Again how readily do the oppressive power and fumes of charcoal make their way into the brain, if we have not first taken water! But when burning violently it has filled the chambers of a house, the fumes of the virulent substance act on the nerves like a murderous blow. See you not too that even within the earth sulphur is generated and asphalt forms incrustations of a noisome stench? see you not, when they are following up the veins of silver and gold and searching with the pick quite into the bowels of the earth, what stenches Scaptensula exhales from below? Then what mischief do gold mines exhale! to what state do they reduce men's faces and what a complexion they produce! Know you not by sight or hearsay how they commonly perish in a short time and how all vital power fails those whom the hard compulsion of necessity confines in such an employment? All such exhalations then the earth steams forth and breathes out into the open air and light of heaven.

Thus too the Avernian spots must send up some power deadly to birds, which rises up from the earth into the air so as to poison a certain portion of the atmosphere; in such a way that a bird as soon as ever it is borne on its wings into it, is then attacked by the unseen poison and so palsied that it tumbles plump down on the spot where this exhalation has its course. And when it falls into it, then the same power of that exhalation robs all its limbs of the remnants of life: first of all it causes a sort of dizziness; but afterwards, when the birds have tumbled into the very springs of the poison, then life too has to be vomited forth, because all round rises up large store of mischievous matter.

Sometimes too this power and exhalation of Avernus dispels whatever air lies between the birds and earth, so that almost a void is left there. And when the birds have arrived in their flight just opposite this spot, at once the buoyant force of their pinions is crippled and rendered vain and all the sustaining efforts of their wings are lost on both sides. So when they are unable to

buoy themselves up and lean upon their wings, nature, you know, compels them by their weight to tumble down to earth, and lying stark through what is now almost a void they disperse their souls through all the openings of their body. * * Again during summer the water in wells becomes colder, because the earth is rarefied by heat and rapidly sends out into the air whatever seeds of heat it happens to have. The more then the earth is drained of heat, the colder becomes the water which is hidden in the earth. Again when all the earth is compressed by cold and contracts and so to say congeals, then, you are to know, while it contracts, it presses out into the wells whatever heat it contains itself.

At the fane of Hammon there is said to be a fountain which is cold in the daylight and hot in the night-time. This fountain men marvel at exceedingly and suppose that it suddenly becomes hot by the influence of the fierce sun below the earth, when night has covered the earth with awful darkness. But this is far far removed from true reason. Why when the sun though in contact with the uncovered body of the water has not been able to make it hot on its upper side, though his light above possesses such great heat, how can he below the earth which is of so dense a body boil the water and glut it with heat? above all when he can scarcely with his burning rays force his heat through the walls of houses. What then is the cause? this sure enough: the earth is more porous and warmer round the fountain than the rest of the earth, and there are many seeds of fire near the body of water. For this reason when night has buried the earth in its dewy shadows, the earth at once becomes quite cold and contracts: in this way just as if it were squeezed by the hand it forces out into the fountain whatever seeds of fire it has; and these make the water hot to the touch and taste. Next when the sun has risen and with his rays has loosened the earth and has rarefied it as his heat waxes stronger, the first-beginnings of fire return back to their ancient seats and all the heat of the water withdraws into the earth: for this reason the fountain becomes cold in the daylight. Again the liquid of water is played upon by the sun's rays and in the daytime is rarefied by his throbbing heat; and therefore it gives up whatever seeds of fire it has; just as it often parts with the frost which it holds in itself, and thaws the ice and loosens its bonds.

There is also a cold fountain of such a nature that tow often when held over it imbibes fire forthwith and emits flame; a pine torch in like manner is lighted and shines among the waters, in whatever direction it swims under the impulse of the winds. Because sure enough there are in the water very many seeds of heat, and from the earth itself at the bottom must rise up bodies of fire throughout the whole fountain and at the same time pass abroad in exhalations and go forth into the air, not in such numbers however that the fountain can become hot, for these reasons a force compels those seeds to burst out through the water and disperse abroad and to unite when they have mounted up. In the sea at Aradus is a fountain of this kind, which wells up with fresh water and keeps off the salt waters all round it; and in many other quarters the sea affords a seasonable help in need to thirsting sailors, vomiting forth fresh waters amid the salt. In this way then those seeds may burst forth through that fountain and well out; and when they are met together in the tow or cohere in the body of the pine-torch, they at once readily take fire, because the tow and pinewood contain in them likewise many seeds of latent fire. See you not too that, when you bring a newly extinguished wick near night-lamps it catches light before it has touched the flame; and the same with the pinewood? And many things beside catch fire at some distance touched merely by the heat, before the fire in actual contact infects them. This therefore you must suppose to take place in that fountain as well.

Next in order I will proceed to discuss by what law of nature it comes to pass that iron can be attracted by that stone which the Greeks call the Magnet from the name of its native place, because it has its origin within the bounds of the country of the Magnesians. This stone men wonder at; as it often produces a chain of rings hanging down from it. Thus you may see sometimes five and more suspended in succession and tossing about in the light airs, one always hanging down from one and attached to its lower side, and each in turn one from the other experiencing the binding power of the stone: with such a continued current its force flies through all.

In things of this kind many points must be established before you can assign the true law of the thing in question, and it must

be approached by a very circuitous road; wherefore all the more I call for an attentive ear and mind.

In the first place from all things whatsoever which we see there must incessantly stream and be discharged and scattered abroad such bodies as strike the eyes and provoke vision. Smells too incessantly stream from certain things; as does cold from rivers, heat from the sun, spray from the waves of the sea, that eater into walls near the shore. Various sounds too cease not to stream through the air. Then a moist salt flavour often comes into the mouth, when we are moving about beside the sea; and when we look on at the mixing of a decoction of wormwood, its bitterness affects us. In such a constant stream from all things the several qualities of things are carried and are transmitted in all directions round, and no delay, no respite in the flow is ever granted, since we constantly have feeling, and may at any time see, smell and hear the sound of anything.

And now I will state once again how rare a body all things have: a question made clear in the first part of my poem also: although the knowledge of this is of importance in regard to many things, above all in regard to this very question which I am coming to discuss, at the very outset it is necessary to establish that nothing comes under sense save body mixed with void. For instance in caves rocks overhead sweat with moisture and trickle down in oozing drops. Sweat too oozes out from our whole body; the beard grows, and hairs over all our limbs and frame. Food is distributed through all the veins, gives increase and nourishment to the very extremities and nails. We feel too cold and heat pass through brass, we feel them pass through gold and silver, when we hold full cups. Again voices fly through the stone partitions of houses; smell passes through and cold, and the heat of fire which is wont ay to pierce even the strength of iron, where the Gaulish cuirass girds the body round. And when a storm has gathered in earth and heaven, and when along with it the influence of disease makes its way in from without, they both withdraw respectively to heaven and earth and there work their wills, since there is nothing at all that is not of a rare texture of body.

Furthermore all bodies whatever which are discharged from things are not qualified to excite the same sensations nor are adapted for all things alike. The sun for instance bakes and dries

up the earth, but thaws ice, and forces the snows piled up high on the high hills to melt away beneath his rays; wax again turns to liquid when placed within reach of his heat. Fire also melts brass and fuses gold, but shrivels up and draws together hides and flesh. The liquid of water after fire hardens steel, but softens hides and flesh hardened by heat. The wild olive delights the bearded she-goats as much as if the flavour it yielded were of ambrosia and steeped in nectar; but nothing that puts forth leaf is more bitter to man than this food. Again a swine eschews marjoram-oil and dreads all perfumes; for they are rank poison to bristly swine, though they are found at times to give us as it were fresh life. But on the other hand though mire is to us the nastiest filth, it is found to be so welcome to swine that they wallow in it all over with a craving not to be satisfied.

There is still one point left which it seems proper to mention, before I come to speak of the matter in hand. Since many pores are assigned to various things, they must possess natures differing the one from the other and must have each its own nature, its own direction: thus there are in living creatures various senses, each of which takes into it in its own peculiar way its own special object; for we see that sounds pass into one thing, taste from different flavours into another thing, smells into another. Again one thing is seen to stream through stones and another thing to pass through woods, another through gold, and another still to go out through silver and brass; for form is seen to stream through this passage, heat through that, and one thing is seen to pass through by the same way more quickly than other things. The nature of the passages, you are to know, compels it so to be, varying in manifold wise, as we have shewn a little above, owing to the unlike nature and textures of things.

Therefore now that these points have all been established and arranged for us as premisses ready to our hand, for what remains, the law will easily be explained out of them, and the whole cause be laid open which attracts the strength of iron. First of all there must stream from this stone very many seeds or a current if you will which dispels with blows all the air which lies between the stone and iron. When this space is emptied and much room left void between, forthwith the first-beginnings of iron fall headlong forward into the void in one mass, and in consequence the

ring itself follows and then goes on with its whole body. And nothing has its primal elements more intricately entangled or coheres in closer connexion than the nature of stubborn iron and its coldness that makes you shiver. Therefore what I say is the less strange, that from among such elements as these bodies cannot gather in large numbers out of the iron and be carried into the void without the whole ring following. This it does do, and follows on until it has quite reached the stone and fastened on it with unseen bonds of connexion. The same thing takes place in all directions: on whatever side a void is formed, whether athwart or from above the first bodies next it are at once carried on into the void; for they are set in motion by blows from another source and cannot by their own free act rise up into the air. Moreover (to render it more feasible, this thing also is helped on by external aid and motion) as soon as the air in front of the ring has been made rarer and the space more empty and void, it follows at once that all the air which lies behind, carries and pushes it on as it were at its back. For the air which lies around them always beats on things; but at such a time as this it is able to push on the iron, because on one side a space is void and receives the iron into it. This air of which I am speaking to you makes its way with much subtlety through the frequent pores of the iron to its minute parts and then thrusts and pushes it on, as the wind a ship and its sails. Again all things must have air in their body, since they are of a rare body and air surrounds and is in contact with all things. This air therefore which is in the inmost recesses of the iron, is ever stirred in restless motion and therefore beats the ring without a doubt and stirs it within, you know: the ring is carried in the direction in which it has once plunged forward, and into the void part towards which it has made its start.

Sometimes too it happens that the nature of iron is repelled from this stone, being in the habit of flying from and following it in turns. I have seen Samothracian iron rings even jump up, and at the same time filings of iron rave within brass basins, when this Magnet stone had been placed under: such a strong desire the iron seems to have to fly from the stone. So great a disturbance is raised by the interposition of the brass, because sure enough when the current of the brass has first seized on

and taken possession of the open passages of the iron, the current of the stone comes after and finds all things full in the iron and has no opening to swim through as before. It is forced therefore to dash against and beat with its wave the iron texture; by which means it repels from it and sets in motion through the brass that which without the brass it often draws to itself. And forbear herein to wonder that the current from this stone is not able to set in motion other things as well as iron: some of these stand still by the power of their own weight; for instance gold; and others, because they are of so rare a body that the current flies through them uninterrupted, cannot in any case be set in motion; to which class wood is found to belong. When therefore the nature of iron lying between the two has received into it certain first bodies of brass, then do the Magnet stones set it in motion with their stream.

And yet these cases are not so much at variance with other things, that I have only a scanty store of similar instances to relate of things mutually fitted one for the other and for nothing else: stones for instance you see are cemented by mortar alone; wood is united with wood so firmly by bulls' glue only, that the veins of boards often gape in cracks before the binding power of the glue can be brought to loosen its hold. Vine-born juices venture to mix with streams of water, though heavy pitch and light oil cannot. Again the purple dye of the shellfish so unites with the body of wool alone, that it cannot in any case be severed, not were you to take pains to undo what is done with Neptune's wave, not if the whole sea were willed to wash it out with all its waters. Then too is there not one thing only that fastens gold to gold, and is not brass soldered to brass by tin? and how many other cases of the kind might one find! what then? you have no need whatever of such long circuitous roads, nor is it worth my while to spend so much pains on this, but it is better briefly to comprise many things in few words: things whose textures have such a mutual correspondence, that cavities fit solids, the cavities of the first the solids of the second, the cavities of the second the solids of the first, form the closest union. Again some things may be fastened together and held in union with hooks and eyes as it were; and this seems rather to be the case with this stone and iron.

And now I will explain what the law of diseases is and from what causes the force of disease may suddenly gather itself up and bring death-dealing destruction on the race of man and the troops of brute beasts. And first I have shewn above that there are seeds of many things helpful to our life; and on the other hand many must fly about conducing to disease and death. When these by chance have happened to gather together and have disordered the atmosphere, the air becomes distempered. And all that force of disease and that pestilence come either from without down through the atmosphere in the shape of clouds and mists, or else do gather themselves up and rise out of the earth, when soaked with wet it has contracted a taint, being beaten upon by unseasonable rains and suns. See you not too that all who come to a place far away from country and home are affected by the strangeness of climate and water, because there are wide differences in such things? for what a difference may we suppose between the climate of the Briton and that of Egypt where the pole of heaven slants askew, and again between that in Pontus and that of Gades and so on to the races of men black with sunbaked complexion? Now as we see these four climates under the four opposite winds and quarters of heaven all differing from each other, so also the complexions and faces of the men are seen to differ widely and diseases varying in kind are found to seize upon the different races. There is the elephant disease which is generated beside the streams of Nile in the midst of Egypt and nowhere else. In Attica the feet are attacked and the eyes in Achaean lands. And so different places are hurtful to different parts and members: the variations of air occasion that. Therefore when an atmosphere which happens to put itself in motion unsuited to us and a hurtful air begin to advance, they creep slowly on in the shape of mist and cloud and disorder everything in their line of advance and compel all to change; and when they have at length reached our atmosphere, they corrupt it too and make it like to themselves and unsuited to us. This new destroying power and pestilence therefore all at once either fall upon the waters or else sink deep into the corn-crops or other food of man and provender of beast; or else their force remains suspended within the atmosphere, and when we inhale from it mixed airs, we must absorb at the same time into our body those things as well. In

like manner pestilence often falls on kine also and a distemper too on the silly sheep. And it makes no difference whether we travel to places unfavourable to us and change the atmosphere which wraps us round, or whether nature without our choice brings to us a tainted atmosphere or something to the use of which we have not been accustomed, and which is able to attack us on its first arrival.

Such a form of disease and a death-fraught miasm erst within the borders of Cecrops defiled the whole land with dead, and dispeopled the streets, drained the town of burghers. Rising first and starting from the inmost corners of Egypt, after traversing much air and many floating fields, the plague brooded at last over the whole people of Pandion; and then they were handed over in troops to disease and death. First of all they would have the head seized with burning heat and both eyes blood-shot with a glare diffused over; the livid throat within would exude blood and the passage of the voice be clogged and choked with ulcers, and the mind's interpreter the tongue drip with gore, quite enfeebled with sufferings, heavy in movement, rough to touch. Next when the force of disease passing down the throat had filled the breast and had streamed together even into the sad heart of the sufferers, then would all the barriers of life give way. The breath would pour out at the mouth a noisome stench, even as the stench of rotting carcases thrown out unburied. And then the powers of the entire mind, the whole body would sink utterly, now on the very threshold of death. And a bitter bitter despondency was the constant attendant on insufferable ills and complaining mingled with moaning. An ever-recurring hiccup often the night and day through, forcing on continual spasms in sinews and limbs, would break men quite, forwearying those forspent before. And yet in none could you perceive the skin on the surface of the body burn with any great heat, but the body would rather offer to the hand a lukewarm sensation and at the same time be red all over with ulcers burnt into it so to speak, like unto the holy fire as it spreads over the frame. The inward parts of the men however would burn to the very bones, a flame would burn within the stomach as within furnaces. Nothing was light and thin enough to apply to the relief of the body of any one; ever wind and cold alone. Many would plunge their limbs burning with disease into

the cool rivers, throwing their body naked into the water. Many tumbled headforemost deep down into the wells, meeting the water straight with mouth wide-agape. Parching thirst with a craving not to be appeased, drenching their bodies, would make an abundant draught no better than the smallest drop. No respite was there of ill: their bodies would lie quite spent. The healing art would mutter low in voiceless fear, as again and again they rolled about their eye-balls wide open, burning with disease, never visited by sleep. And many symptoms of death besides would then be given, the mind disordered in sorrow and fear, the clouded brow, the fierce delirious expression, the ears too troubled and filled with ringings, the breathing quick or else strangely loud and slow-recurring, and the sweat glistening wet over the neck, the spittle in thin small flakes, tinged with a saffron-colour, salt, scarce forced up the rough throat by coughing. The tendons of the hands ceased not to contract, the limbs to shiver, a coldness to mount with slow sure pace from the feet upwards. Then at their very last moments they had nostrils pinched, the tip of the nose sharp, eyes deep-sunk, temples hollow, the skin cold and hard, on the grim mouth a grin, the brow tense and swollen; and not long after their limbs would be stretched stiff in death: about the eighth day of bright sunlight or else on the ninth return of his lamp they would yield up life. And if any of them at that time had shunned the doom of death, yet in after time consumption and death would await him from noisome ulcers and the black discharge of the bowels, or else a quantity of purulent blood accompanied by headache would often pass out by the gorged nostrils: into these the whole strength and substance of the man would stream. Then too if any one had escaped the acrid discharge of noisome blood, the disease would yet pass into his sinews and joints and onward even into the sexual organs of the body; and some from excessive dread of the gates of death would live bereaved of these parts by the knife; and some though without hands and feet would continue in life, and some would lose their eyes: with such force had the fear of death come upon them. And some were seized with such utter loss of memory that they did not know themselves. And though bodies lay in heaps above bodies unburied on the ground, yet would the race of birds and beasts either scour far away, to escape the acrid stench, or where

any one had tasted, it drooped in near-following death. Though hardly at all in those days would any bird appear, or the sullen breeds of wild beasts quit the forests. Many would droop with disease and die: above all faithful dogs would lie stretched in all the streets and yield up breath with a struggle; for the power of disease would wrench life from their frame. Funerals lonely, unattended, would be hurried on with emulous haste. And no sure and general method of cure was found; for that which had given to one man the power to inhale the vital air and to gaze on the quarters of heaven, would be destruction to others and would bring on death. But in such times this was what was deplorable and above all eminently heart-rending: when a man saw himself enmeshed by the disease, as though he were doomed to death, losing all spirit he would lie with sorrow-stricken heart, and with his thoughts turned on death would surrender his life then and there. Ay for at no time did they cease to catch from one another the infection of the devouring plague, like to woolly flocks and horned herds. And this above all heaped death on death: whenever any refused to attend their own sick, killing neglect soon after would punish them for their too great love of life and fear of death by a foul and evil death, abandoned in turn, forlorn of help. But they who had stayed by them, would perish by infection and the labour which shame would then compel them to undergo and the sick man's accents of affection mingled with those of complaining: this kind of death the most virtuous would meet. * * and different bodies on different piles, struggling as they did to bury the multitude of their dead: then spent with tears and grief they would go home; and in great part they would take to their bed from sorrow. And none could be found whom at so fearful a time neither disease nor death nor mourning assailed.

Then too every shepherd and herdsman, ay and sturdy guider of the bent plough sickened; and their bodies would lie huddled together in the corners of a hut, delivered over to death by poverty and disease. Sometimes you might see lifeless bodies of parents above their lifeless children, and then the reverse of this, children giving up life above their mothers and fathers. And in no small measure that affliction streamed from the land into the town, brought thither by the sickening crowd of peasants meeting

plague-stricken from every side. They would fill all places and buildings: wherefore all the more the heat would [destroy them and] thus close-packed death would pile them up in heaps. Many bodies drawn forth by thirst and tumbled out along the street would lie extended by the fountains of water, the breath of life cut off from their too great delight in water; and over all the open places of the people and the streets you might see many limbs drooping with their half-lifeless body, foul with stench and covered with rags, perish away from filth of body, with nothing but skin on their bones, now nearly buried in noisome sores and dirt. All the holy sanctuaries of the gods too death had filled with lifeless bodies, and all the temples of the heavenly powers in all parts stood burdened with carcases: all which places the wardens had thronged with guests. For now no longer the worship of the gods or their divinities were greatly regarded: so overmastering was the present affliction. Nor did those rites of sepulture continue in force in the city, with which that pious folk had always been wont to be buried; for the whole of it was in dismay and confusion, and each man would sorrowfully bury as the present moment allowed. And the sudden pressure and poverty prompted to many frightful acts; thus with a loud uproar they would place their own kinsfolk upon the funeral piles of others, and apply torches, quarrelling often with much bloodshed sooner than abandon the bodies.

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